MARCH 15, 1952

MODERN MEDICINE

The Journal of Diagnosis and Treatment

Dr. Sara M. Jordan *(see page 13)*

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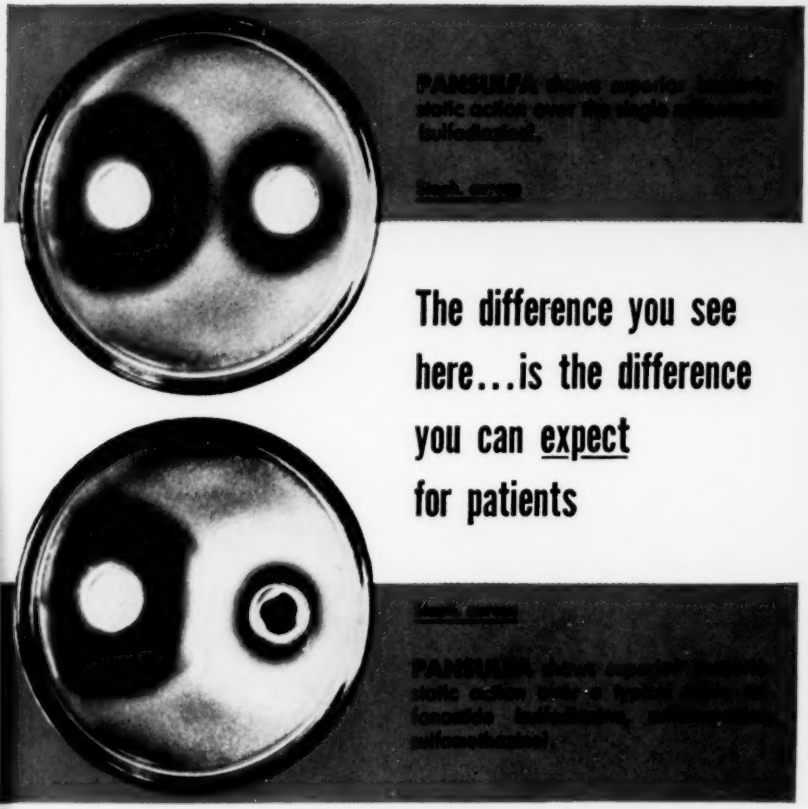

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*See Lehr, D., N. Y. St. J. Med. 11:1361, 1950

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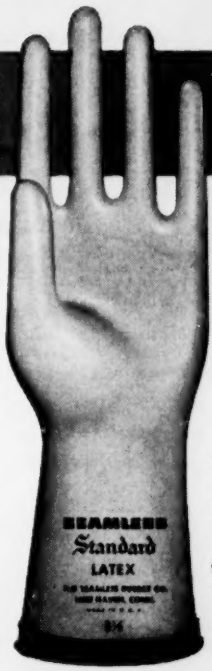

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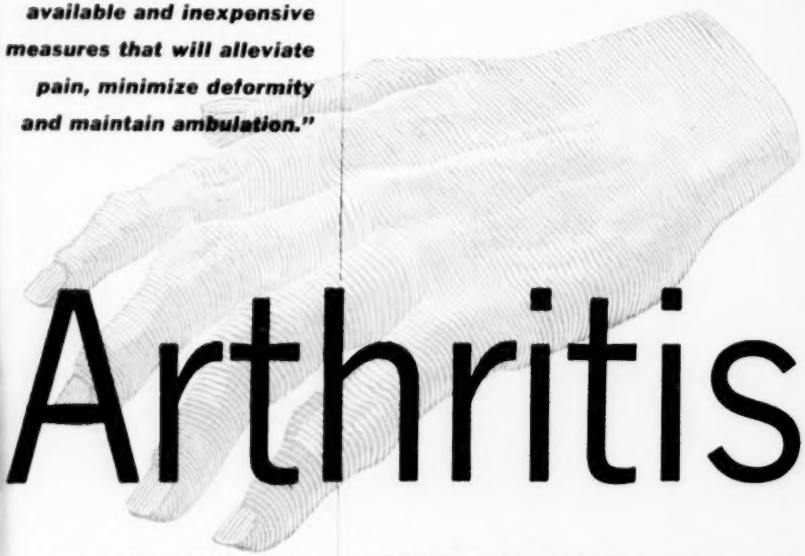
Pruce, A. M.: J. Med. Ass. Georgia 40: 101, 1951



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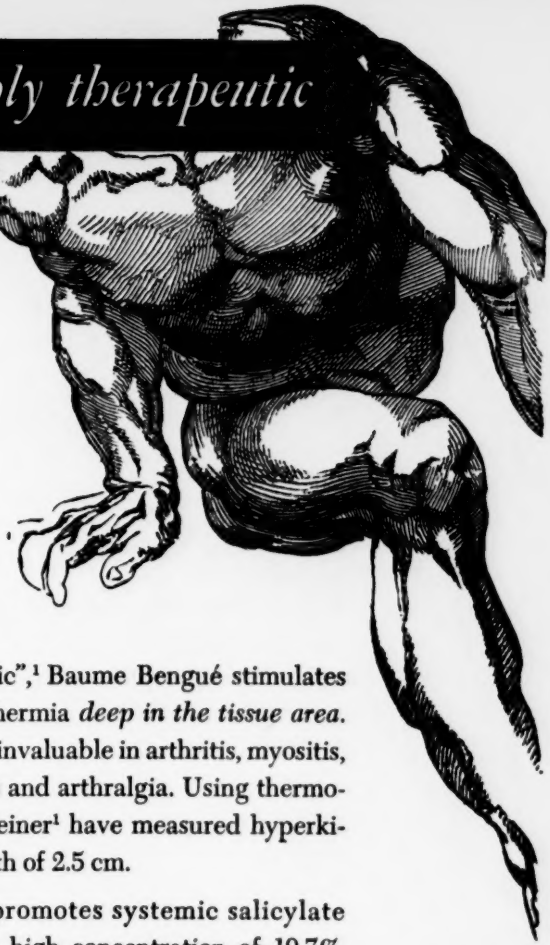

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1. Lange, K., and Weiner, D.: J. Invest. Dermat. 12:263 (May) 1949.

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MODERN MEDICINE

THE JOURNAL OF DIAGNOSIS AND TREATMENT

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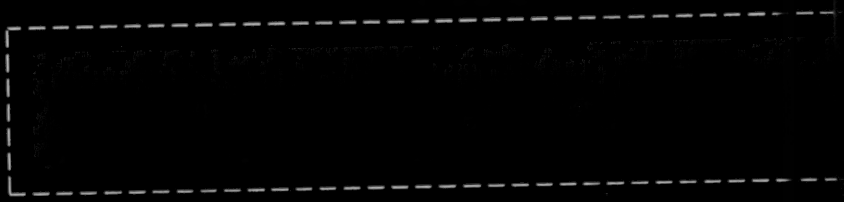
"magic"
in
a
syringe



MODERN MEDICINE

THE JOURNAL OF DIAGNOSIS AND TREATMENT

NEWS ABOUT A BAUER & BLACK PRODUCT

See the difference when an elastic bandage is *truly* elastic?

the bandage on the left is TENSOR — woven with live rubber threads

As you can see, TENSOR has far more stretch and snap-back than conventional elastic bandages. That's because TENSOR—derives its elasticity from *live rubber* threads—does not depend on the weave of the fabric as rubberless bandages do.

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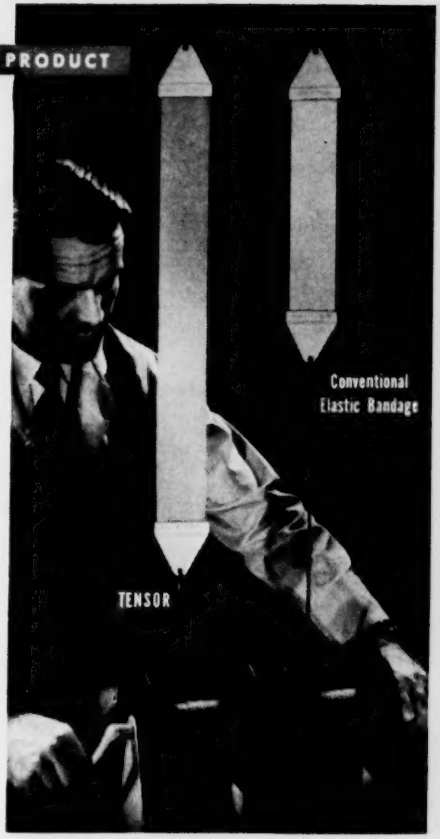
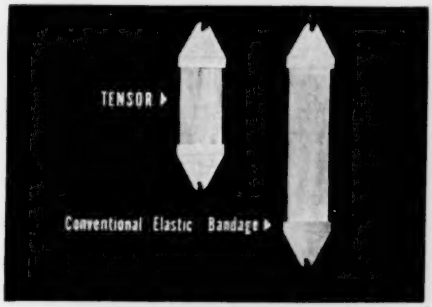


STRETCHED TO LIMIT, identical lengths of TENSOR and conventional elastic bandage display big difference in elasticity. *Live rubber threads* give TENSOR its greater stretch.



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for

March 15

1952

Modern Medicine

Vol. 20, No. 6

THE WOMAN ON THE COVER is Dr. Sara M. Jordan of Boston, Director of the Department of Gastroenterology of the Lahey Clinic, staff member of New England Baptist and New England Deaconess hospitals, and diplomate of the American Board of Internal Medicine. A past president of the American Gastroenterological Association, Dr. Jordan has served as vice-chairman and secretary of the section on gastroenterology of the American Medical Association. She is a fellow of the American College of Physicians and a member of the Massachusetts Medical Society. An associate editor of *Gastroenterology*, Dr. Jordan is author of numerous articles and the recently printed book, *Good Food for Bad Stomachs*. The review on page 94, "Surgical Procedures for Peptic Ulcer," is based on a paper which appeared in *Gastroenterology*. A second report, "Diseases Associated with Irritable Colon," on page 88, was published originally in the *Rocky Mountain Medical Journal*.

Contents for March 15 1952

CONTINUED

In treating para-nasal infection
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Contents for March 15 1952

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LETTER FROM THE EDITOR

Dear Reader:

No one values a draught of water like a thirsty man. The miraculous necessaries of life—the sun that warms us, the air we breathe—are taken for granted. Only when the sun doesn't shine do we appreciate what a boon its light and heat are.

Thus it is that we do not hear from most of you unless something has happened to your copy of *Modern Medicine*. A case in point is the following letter from the High Commissioner of the Trust Territory of the Pacific Islands:

> As you are probably aware, the United States has undertaken a trusteeship for the United Nations involving all those former Japanese mandated islands in the Pacific area known as Micronesia.
>
> The area covers a vast section of the Pacific larger than the United States, but the individual islands are small and our outposts are very remote and isolated. We have seven small district hospitals, each manned by two American physicians assisted by native personnel. These American physicians are cut off from most of the literature reaching physicians in the United States.
>
> This office, and the physicians themselves, will appreciate your sending *Modern Medicine* to each of the following addresses.

We are encouraged and sobered by the thought that *Modern Medicine* is so taken for granted that it is high on the list of things most missed when American physicians are isolated in remote outposts. Our publisher is making arrangements to supply their want.

Walter C. Alvarez

EDITOR-IN-CHIEF

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rapid and prolonged vasoconstriction

Potent bacteriostasis—Par-Pen provides 5000 units of penicillin per cc. It is therefore a potent weapon against the many penicillin susceptible bacteria which frequently initiate colds, and which almost invariably prolong and intensify colds of primarily virus origin.

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Correspondence

Communications from the readers of MODERN MEDICINE *are always welcome. Address communications to The Editors of* MODERN MEDICINE, *84 South 10th St., Minneapolis 3, Minn.*

White Count Usually Up

TO THE EDITORS: Diagnostix Case MM-207 in the January 15, 1952 issue of *Modern Medicine* (p. 111) is, as usual, well done and interesting. However, we have been wondering, lately, if a normal white count is the usual finding in cases of joint and cutaneous reactions following penicillin therapy.

The typical reaction seen here has developed from eight to fourteen days after one or at most two injections of 300,000 units of penicillin generally given for a cold. The joint involvement presents symptomatology more severe than the physical findings, although some periarticular swelling is ordinarily present. The alarming finding, however, has been a white count of 20,000 to 30,000 with an eosinophil level between 18 and 30%.

L. W. STAUFFER, M.D.

Eugene, Ore.

Two in Texas

TO THE EDITORS: I appreciate your publishing a report of my studies on moniliasis in pregnancy (*Modern Medicine*, Jan. 1, 1952, p. 91). However, I was placed in the Galveston branch of the University of Texas rather than in the Dallas branch. Since a good-natured rivalry seems to exist between the branches, a note of correction may be in order. The University of Texas now has two official branches. Ours is the Southwestern Medical Branch, Dallas.

HERMAN I. KANTOR, M.D.

Dallas

¶Our apologies and hasty withdrawal from the rivalry between Texans, however good-natured.—Ed.

Law of Initial Values

TO THE EDITORS: I wish to make a few comments which may clarify the controversy concerning the suppressive effect of thyroid extracts on the thyroid gland, as presented by Dr. Edwin Matlin (*Modern Medicine*, Jan. 1, 1952, p. 28).

The best clinical evidence of a certain depressive effect of thyroid medication exists in hyperthyroidism. Soon after the first thyroid extracts were prepared, Chwostek used them in Vienna mainly for the treatment of hyperthyroidism. A number of authors have shown that certain quantitative correlations prevail in this field. When, for example, the basal metabolism is increased by more than 60%, we hardly ever see an increase by thyroid medication but often a decrease.

(Continued on page 24)

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On the other hand, in hypothyroidism very small doses of thyroid extract can cause an intense rise in the basal metabolic rate. The same is true of the iodide medication which, according to Thomson and others, produces an increase in the basal metabolic rate up to a point, after which the effect is reversed. The conclusion would be that the thyroid medication will reverse its action after a certain improvement has been reached in hypothyroidism.

Prolonged medication should be used under constant control of the basal metabolic rate or other factors and stopped when normal or increased levels have been reached. This is part of a more general biologic law which I have called the Law of Initial Values and which, in my opinion, deserves greater attention in therapy. All my publications referring to this law have been in German (e.g., *Klin. Wchnschr.* 10:1889, 1931) but Linn J. Boyd has made a correct summary in his book *A Study of the Simile in Medicine* (Boericke & Tafel, Philadelphia, 1936, pp. 319-324).

JOSEPH WILDER, M.D.

New York City

Unintended Idiosyncrasies

TO THE EDITORS: I do not like to raise objections over petty points, but perhaps the following comments may be useful:

In the December 15, 1951 issue of *Modern Medicine* I ran into a couple of printing idiosyncrasies which I would like to call to your attention. On page 104 there is reference to a chemical substance indicated as HN_2. Possibly this was intended as a symbol for some compound. This seems

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an extensive crush injury of the hand, provides ". . . an instance of effective healing under CHLORESIUM therapy, following an apparent failure to respond to skin grafting."[1]

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1. Lowry, K. F.: The Management of Resistant, Non-Healing Skin Lesions: A Report of Three Cases, Postgrad. Med., to be published.
2. Niemiro, B. J.: Delayed Healing in Pilonidal Cyst Wounds, Journal Lancet, *71*:364, 1951.
3. Combes, F. C.; Zuckerman, R., and Kern, A. B.: Chlorophyll—Its Use in Topical Therapy, New York State J. Med., to be published.

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Rystan

to have become a fashion these days and unless the meaning of the symbol is clearly defined this shorthand way of writing can be most confusing. Therefore, unless this designation is supposed to be a shorthand symbol, it has no chemical meaning whatsoever. This sort of thing leaves a bad impression.

On page 106 of the same issue pH_3 is used for the usual *p*H 3. Since the latter designation is well established and has been consecrated by long usage, it would seem that it is not wise for *Modern Medicine* to make this innovation.

S. MORGULIS

Omaha

¶Far from being innovations, the instances Mr. Morgulis refers to were typographic errors, a longstanding bane of all editors.—Ed.

Clinical Photography

TO THE EDITORS: Medical photography is fast becoming a routine procedure in many of our hospitals; its use as a supplement to the written record has proved invaluable, not only as a record, but from the educational standpoint of instructing medical students, interns, and student nurses. Clinical photographs, when placed in the patient's chart, have untold value, yet many doctors fail to order a photograph chiefly because medical photography is a relatively new field and its use does not dawn upon them until they are ready to present a case. Then they often wish that they had had a particular patient photographed.

The majority of medical photographers are faced with the problem of educating the doctor in terms of photographing the patient, but that is not enough if medical photo-

graphy is to take its place as an aid in helping the doctor to demonstrate the effects or results achieved and, I might add, as an aid in diagnosis.

A number of medical photographers, especially in the East, feel that some type of certification or licensing should be instigated by the medical profession, thereby assuring somewhat the ability of the medical photographer in the mind of the doctor. Such certification or licensing would also give a little professional prestige to the photographer and would certainly simplify matters when the question of employment arises.

Publications on the various types of medical photography are increasing every year; countless numbers of papers have been written with authority on the subject and there is only one national organization catering especially to the biological photographer. This "baby" in the field of medicine is going to survive but, to survive in the best interests of the medical profession, we require professional recognition.

So far, I have only mentioned the photography of patients but there are as many specialties in the field of medical photography as in the medical profession—the scholars of photomicrography, research, ophthalmology, motion picture technic, endoscopy, and so on. In reality, then, we have the general practitioner plus an assortment of specialists.

(Continued on page 32)

Glycosuria and Ketonuria in Patients Receiving ACTH or CORTISONE*

All patients should have a complete urinalysis before receiving corticotropin (ACTH or Cortisone). Particular attention should be paid to the presence of glucose or acetone in the urine.

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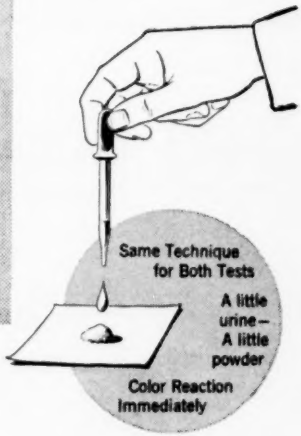
The proper examination of the urine for sugar during treatment with ACTH or Cortisone may reveal a number of prediabetics.

Increase in insulin dosage is often required in the diabetic patient receiving ACTH or Cortisone.



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For the rapid detection of acetone in urine.

Combination Kit

For Office—Medical Bag—Testing by patients at home.

Contains a vial of Galatest and Acetone Test (Denco), a dropper and color chart. Price $2.25

Galatest and Acetone Test (Denco) require no special laboratory equipment, test tubes, liquid reagents, or external sources of heat.

One or two drops of the specimen to be tested are dropped upon a little of the powder and a color reaction occurs immediately if acetone or reducing sugar is present.

Patients are easily taught to use Galatest and Acetone Test (Denco).

Write for descriptive literature.

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Dept. 32-Q, 163 Varick Street, New York 13, N. Y.

***BIBLIOGRAPHY**

"Cortisone"—J. M. Carlisle, M.D., A. Gibson, M.D., E. Schmatolla, M.D.—Postgraduate Medicine, Aug., 1950.

"Oral Cortisone Therapy in Intractable Bronchial Asthma"—E. Schwartz, M.D.—Journal of the American Medical Association, December 29, 1951.

"Cortisone (Compound E), Summary of Its Clinical Uses"—J. M. Carlisle, M.D.—British Medical Journal, September 9, 1950.

"Cortisone and ACTH—A Review of Certain Physiologic Effects and Their Clinical Implications"—Randall G. Sprague, M.D.—American Journal of Medicine, May, 1951.

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Designed primarily to meet the exacting requirements of urologic electro-surgery, this WAPPLER SURGICAL UNIT combines great power with precise and **blended** control (when required) of cutting and coagulating currents in any proportion desired. For transurethral resections, and other urologic procedures, this high frequency unit cuts and coagulates with such **ease and speed** as to expedite materially the most difficult techniques. When the employment of tissue cutting and haemostatic currents is indicated in other fields, such as General, Thoracic, Proctologic, Ophthalmologic Surgery, etc., the remarkable simplicity of control, complete dependability and uniformly excellent results achieved with the WAPPLER C-263 recommend it as the instrument of choice.

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I felt that this should be brought to your attention; whether any action can be forthcoming remains to be seen. The medical photographer, whether in private practice or employed by a large hospital, medical college, small clinic, or medical group, should be given professional recognition in the form of certification or license.

DENNIS A. STEVENS

New York City

Gay but No Spice

TO THE EDITORS: The stories which appeared in your Patients I Have Met department exhibit a keen sense of humor and always cause much merriment here. Thank you for your contribution toward making life a little more gay.

WALTER L. WILSON, M.D.

Rahway, N. J.

► TO THE EDITORS: What has happened to the "spice" in Patients I Have Met?

WILLIAM S. HAWKINS, M.D.

Greenville, S. C.

Splendid Cooperation

TO THE EDITORS: Please accept the thanks of another Red Feather volunteer for the fine support you gave to the Community Chest campaigns in your publication last fall. I believe that the campaign would not have been so successful without the splendid cooperation of the magazines.

What you did is greatly appreciated by the thousands of volunteer workers in the Red Feather agencies.

H. J. HEINZ II
National Chairman
United Red Feather Campaigns
of America

Pittsburgh

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Sharp & Dohme, Philadelphia 1, Pa.

*Goodman, L. and Gilman, A.: The Pharmacological Basis of Therapeutics, New York, The Macmillan Co., 1941, p. 175

sleep***

NORMAL SLEEP

SHARP & DOHME

Questions & Answers

All questions received will be answered by letter directed to the petitioner; questions chosen for publication will appear with the physician's name deleted. Address all inquiries to the Editorial Department, MODERN MEDICINE, *84 South Tenth Street, Minneapolis 3, Minnesota.*

QUESTION: What are the usual criteria for establishing diagnosis of subclinical or latent diabetes mellitus?
M.D., New York

ANSWER: *By Consultant in Diabetes.* Probably the most concise and complete answer to this question can be given by quoting from one of the Diabetes Detection Drive bulletins of the American Diabetes Association. The following is taken from *Suggested Medical Procedures and Reporting Methods for Follow-up:*

The presence of sugar in the urine is not proof of diabetes but indicates need for critical analysis, with history, general examination, follow-up, and periodic observations for life.

Subsequent laboratory tests may be temporarily within normal limits and conclusive diagnosis of diabetes cannot be made immediately. In some such cases, definite diabetes develops later. Therefore, anyone who has had sugar in the urine, though considered nondiabetic, should have the condition rechecked annually.

Sugar found in the urine on screening tests should never be disregarded. Probability of diabetes is high if a positive test is obtained two to three hours after a meal containing a large amount of carbohydrate, especially if the individual is overweight or diabetes is in the family history.

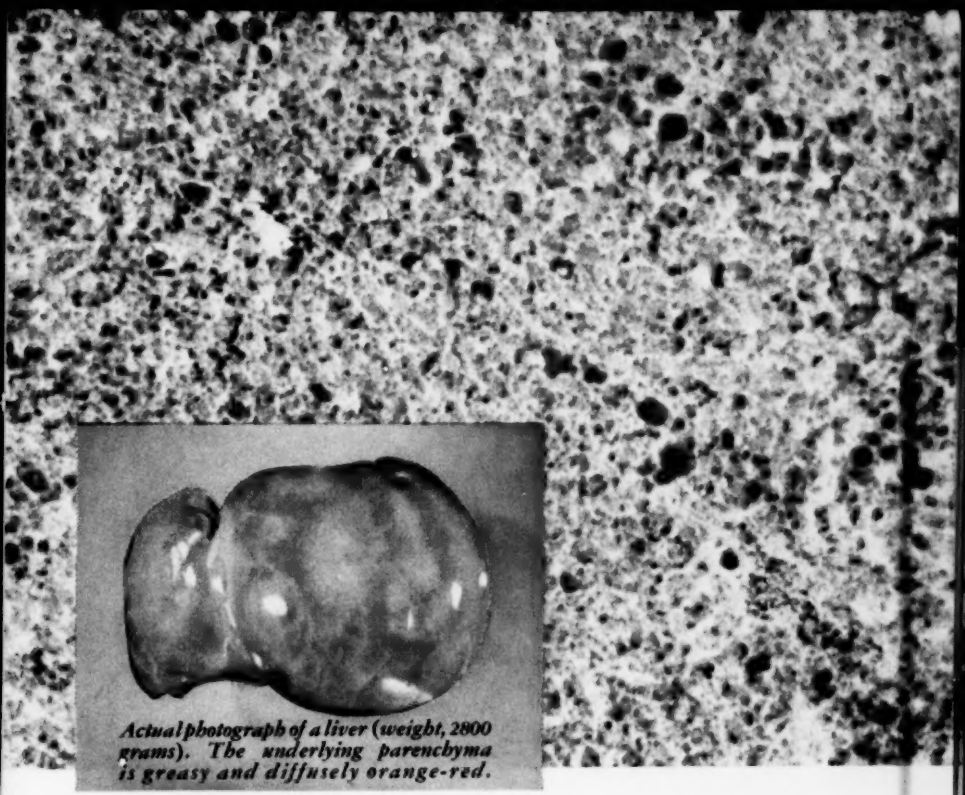
QUESTION: A 31-year-old patient weighing 230 lb. has had intercourse since the age of 15. He has had a sterile marriage for three years with normal libido. Examination revealed a penis of normal size, pubic and axillary hair present, testicles hardly palpable, and infantile scrotum. What therapy can you suggest?
M.D., Massachusetts

ANSWER: *By Consultant in Urology.* Probably nothing can be done for a male with normal libido and very small testicles with an infantile scrotum. The time has passed when such gonads can be stimulated by any available preparation.

Some feeling exists that protracted use of considerable doses of chorionic gonadotropin will lead to some improvement, but this is doubtful. The suggested dose is 750 rat units four to five times weekly for six weeks. If no effect is noticed by this time, further treatment is useless.

QUESTION: How reliable is the glucose tolerance test in screening out people who eventually have diabetes?
M.D., New York

ANSWER: *By Consultant in Diabetes.* At present the glucose tolerance test is the only conclusive diagnostic test for subclinical cases of diabetes mellitus. Few statistics can be found concerning the reliability



Actual photograph of a liver (weight, 2800 grams). The underlying parenchyma is greasy and diffusely orange-red.

Microscopic section of liver stained for fat with Sudan 4 and counterstained with hematoxylin. The numerous fat-laden liver cells show up orange-red in color. Magnification: X 60. Inset shows liver from which section was taken.

The liver of an overweight patient

Weight reduction—of even a few pounds—is often the surest means of lengthening life and diminishing future illnesses.

'Dexedrine' Sulfate curbs appetite, makes it easy for the patient to adhere to a low-calorie diet and thus to reduce weight safely—without the use (and risk) of such drugs as thyroid.

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the most effective preparation for control of appetite in weight reduction

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Acnomel in acne

Smith, Kline & French Laboratories, Philadelphia

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of the test. Discussion of the test and an editorial appear in the first issue of *Diabetes*, the publication of the American Diabetes Association. One of the shortcomings of the Diabetes Detection Program of the American Diabetes Association is the paucity of exhaustive follow-up study, through glucose tolerance tests, on the subclinical group which show positive urine findings on mass urine screening tests. Recently two small grants were awarded to determine more about the question, and we hope considerable information will be available in the years to come.

Blood sugar determinations—The normal range of fasting blood sugar by the Folin-Wu method is generally considered to be between 70 and 110 mg. per 100 cc. of blood. Fasting blood sugar level exceeding 130 mg. is strongly suggestive of diabetes.

Hyperglycemia one and a half to two hours after a meal containing a large amount of carbohydrate is valuable in the diagnosis of diabetes, especially when the fasting blood sugar level is normal.

The Folin-Wu method using venous blood and the Folin-Malmros method using capillary blood are commonly used. Determination of true glucose by the Somogyi or other methods is preferred by many authorities and should be adopted whenever possible.

High probability of diabetes is indicated with the presence of any amount of glucose in the urine accompanied by blood sugar values above the following levels:

- Venous blood sugar

  1] Folin-Wu method: over 130 mg. fasting or 200 mg. after eating

  2] Somogyi or other method for true glucose value: over 110 mg. fasting or 150 mg. after eating.

- Capillary blood sugar
  1] Folin-Malmros method: over 140 mg. fasting or 240 mg. after eating
  2] True glucose value methods: over 120 mg. fasting or 200 mg. after eating.

Glucose tolerance tests—Sugar tolerance curves help to determine the presence or absence of diabetes in cases where other data are inconclusive. In all borderline cases, a glucose tolerance test is always definitely indicated.

The standard oral glucose tolerance test is usually employed. The patient is instructed not to curtail his diet for three days prior to the test and to report without taking any food after the previous evening meal. A fasting blood sugar determination is made and the urine is voided at the same time and tested for sugar. Then 0.8 gm. of glucose per pound (1.75 gm. per kilogram of body weight) is dissolved in a glass of water and given orally. Lemon juice may be added for flavor. Venous or capillary blood sugars and urine specimens are then examined one-half, one, two, and three hours after glucose ingestion.

The most important figures in this test are the fasting blood sugar and the blood sugar two hours after glucose ingestion. If the fasting blood sugar is between 70 and 110 mg. and the two-hour blood sugar drops to the level of 120 mg. or lower,

(Continued on page 42)

upon exposure

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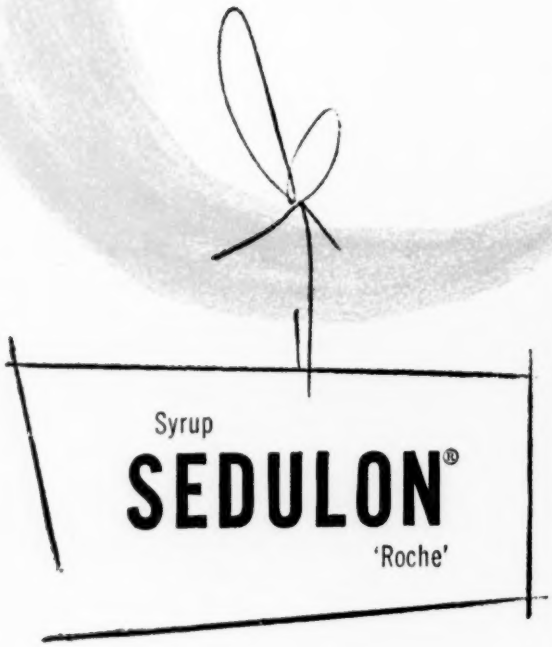

non-narcotic—in place of codeine

diabetes can be excluded. If the fasting blood sugar level is above 120 mg. and the two-hour blood sugar is above 140 mg., the diagnosis of diabetes can be made. The peak of the curve in this test will be reached in half an hour and one hour. Many authorities feel that if the peak exceeds 170 mg., strong evidence exists that diabetes is present.

Summary—Individuals with positive tests for sugar in the urine should be considered as diabetic until proved otherwise. Such cases should be studied and observed for a long period of time. Blood sugar determinations two hours after a specific carbohydrate meal will usually indicate the presence or absence of diabetes. In doubtful or borderline cases a standard glucose tolerance test is recommended.

Individuals who show glycosuria on screening examinations and whose subsequent tests, either postprandial blood sugars or glucose tolerance, are within the normal range should be observed at least annually for the possible development of diabetes. This is especially true of individuals who are overweight, past 40 years of age, or have a history of diabetes in the family.

Such simple direct analysis and observation will undoubtedly lead to diagnosis of diabetes in many mild cases and, consequently, to early institution of proper care which may add many years of life and prevent a number of complications.

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anticholinergic gives
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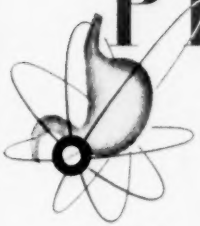

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The pharmacodynamics of PRANTAL Methylsulfate have been the subject of extensive laboratory investigations in which the classical procedures were used. Studies by leading clinical investigators have confirmed the value of its unusual properties in treatment of the peptic ulcer syndrome.

A Clinical Research Division monograph is now in press and will be sent to you promptly on request.

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*T. M.

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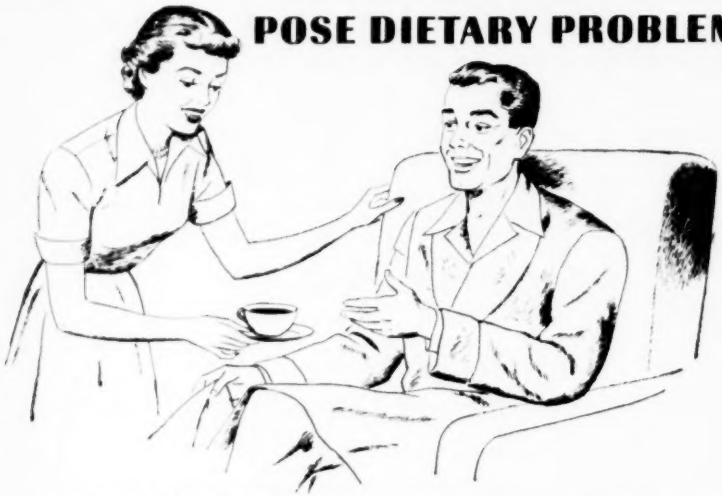
When Functional Derangements

POSE DIETARY PROBLEMS



In the interest of maintaining good nutrition in the patient, many functional derangements of the gastrointestinal tract make the use of a well rounded dietary supplement, such as Ovaltine in milk, highly advantageous. Among the functional derangements more commonly encountered are nausea, anorexia, gastritis, diarrhea, dysentery, enteritis, and colitis.

In these conditions, Ovaltine in milk is particularly useful, not only because of its easy digestibility but also because of its blandness and its high nutrient content. It offers the opportunity of providing a balanced fare of essential nutrients without mechanical irritation or excessive digestive demands. Hence it qualifies especially when customarily eaten foods are contraindicated and a nutritious bland diet is required.

The wealth of nutrients supplied by three glassfuls of Ovaltine in milk is outlined in the table below.

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Ovaltine

Three servings of Ovaltine, each made of ½ oz. of Ovaltine and 8 fl. oz. of whole milk, provide:

PROTEIN	32 Gm.	VITAMIN A	3200 I.U.
CARBOHYDRATE	65 Gm.	VITAMIN D	420 I.U.
FAT	30 Gm.	ASCORBIC ACID	30 mg.
CALCIUM	1.12 Gm.	NIACIN	6.7 mg.
COPPER	0.7 mg.	PANTOTHENIC ACID	3.1 mg.
IODINE	0.7 mg.	PYRIDOXINE	0.6 mg.
IRON	12 mg.	RIBOFLAVIN	2.0 mg.
PHOSPHORUS	940 mg.	THIAMINE	1.2 mg.
CALORIES	658		

Two kinds, Plain and Chocolate Flavored. Serving for serving, they are virtually identical in nutritional content.

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- ***Identified by one easily remembered name—Dramcillin—***
- ***Provides buffered penicillin G potassium, the oral efficacy of which is long established.***
- ***Presents Sulfacetimide as a component of all penicillin-triple sulfonamide combinations.***

New DRAMCILLIN-500 . . .

(500,000 units of penicillin per teaspoonful)*

Highest potency liquid oral penicillin available. Most economical liquid oral penicillin available. Fully effective on convenient 8 to 12 hour dosage schedule.

New DRAMCILLIN-250 with Triple Sulfonamides . . . *and* *New* DRAMCILLIN-250 TABLETS with Triple Sulfonamides

(250,000 units of penicillin and 0.5 Gm. mixed sulfonamides† per teaspoonful or tablet)*

Effective two-fold attack against wider range of microorganisms
Minimizes possibility of development of drug-resistant organisms

DRAMCILLIN-250 (250,000 units* per teaspoonful).

DRAMCILLIN — (100,000 units* per teaspoonful).

DRAMCILLIN with Triple Sulfonamides — (100,000 units of penicillin* and 0.5 Gm. of triple sulfonamides† per teaspoonful).

Also: **DROPCILLIN** — (50,000 units* per dropperful).

*buffered crystalline penicillin G potassium
†0.167 Gm. each of sulfadiazine, sulfamerazine and *sulfacetimide* (the sulfa of choice as the third component)

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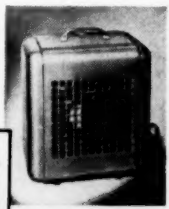
Call your Airkem Supplier today or write to Airkem, Inc., 241 East 44th Street, New York 17, N. Y.



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effective in 6 out of 7 cases of functional vomiting[1] . . . reduces gastrointestinal smooth muscle contractions physiologically . . . contains no antihistaminics, barbiturates, or other drugs . . . also useful in nausea of pregnancy, and for drug- or anesthetic-induced vomiting

1. Bradley, J. E., et al.: J. Pediat. 38:41, 1951; idem: Amer. Acad. Pediat., meeting Oct. 16, 1951.

IMPORTANT: **EMETROL** is stabilized at an optimal physiologic pH level. Dilution would upset this careful balance. For this reason, **EMETROL** is always taken straight, and no fluids of any kind are allowed for at least 15 minutes after administration.

Supplied:
In bottles of 3 fl.oz. and 16 fl. oz., at pharmacies everywhere

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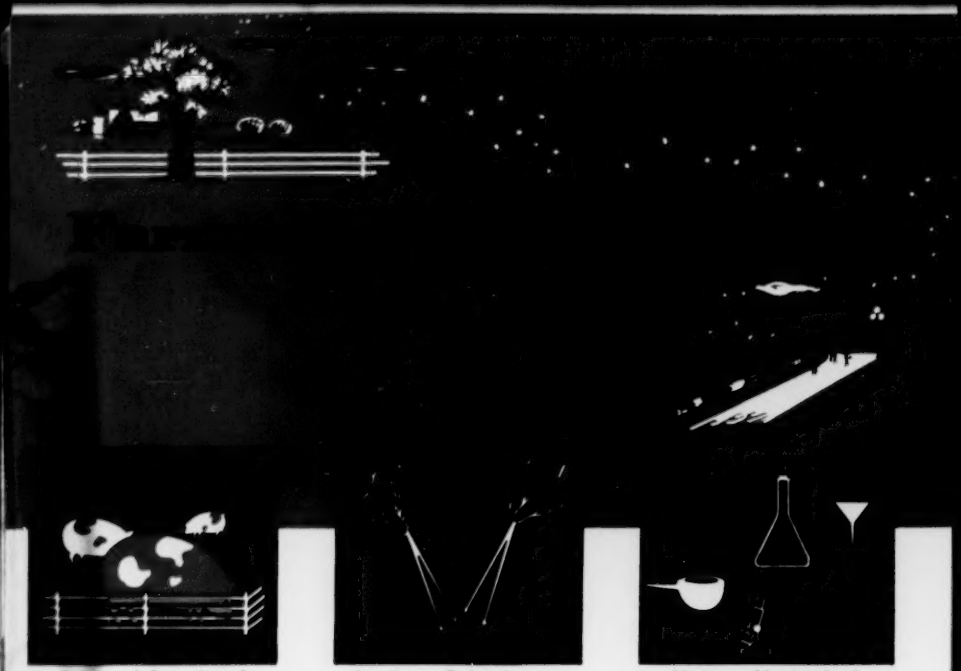

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As a division of Wilson & Co., Inc.—a leader in the meat processing industry—The Wilson Laboratories are able to exercise rigid control in the selection of the highest quality raw materials and are assured an adequate supply of the healthiest livestock available.

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Glands are removed and collected according to exacting specifications developed by The Wilson Laboratories through 33 years experience as pioneers in the development of fine pharmaceuticals of animal origin.

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The unique method of preparation has made possible adrenocorticotropic hormone in a stable, highly potent solution at a price most patients can afford. CORTICOTROPIN SOLUTION WILSON provides the desired pharmacologic activity of ACTH in standardized potency and stable form.

FOR DEPENDABLE EFFECTIVENESS AT MINIMUM COST SPECIFY

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CORTICOTROPIN SOLUTION WILSON is supplied in a multiple dose vial which eliminates the inconvenience of mixing individual doses and abolishes the waste of discarding unused portions. Each 5 cc. vial contains 200 U.S.P. units.

All claims made for Corticotropin Solution Wilson have been approved by the Council on Pharmacy and Chemistry of the American Medical Association.

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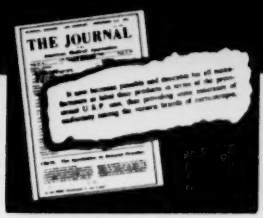

A.M.A. Council Recommended Standardization

CORTICOTROPIN SOLUTION WILSON is standardized in U.S.P. units, as recommended by the Council on Pharmacy and Chemistry of A.M.A. and the U.S.P. Committee of Revision[1]. Confusion, which may result from a multiplicity of standards, is thus minimized.

1. J.A.M.A. 147:326 (Sept. 22) 1951.

Stable Solution of ACTH

CORTICOTROPIN SOLUTION WILSON is a potent solution of ACTH—stable for more than 1½ years without refrigeration. It is a true solution—not a suspension. It does not require aqueous reconstitution, mixing, shaking or heating.

RELATIVELY LOW COST

Thrifty "farm to pharmacy" control combined with new methods of preparation, purification, and standardization, enables The Wilson Laboratories to sell CORTICOTROPIN SOLUTION WILSON at a relatively low cost. These new economies now make ACTH therapy available at a price most patients can afford.

Physicians' Price: $10.00 per 5 cc. vial containing 200 U.S.P. units (equivalent to $2.00 per cc. containing 40 U.S.P. units).

Forensic Medicine

ARTHUR L. H. STREET, LL.B.

Prepared especially for Modern Medicine

PROBLEM: Defendants, a physician and a layman, were prosecuted under California law for conspiracy to produce abortions. [1] Could the women involved be considered accomplices of the defendants in the sense that their testimony must be corroborated before defendants could be convicted? [2] Was it a valid defense that the abortions were to be performed in Mexico?

COURT'S ANSWERS: [1] Yes. [2] No.

The California District Court of Appeal, Second District, Division 3, reasoned: [1] Under California statutes, the woman involved in illegal abortion is not subject to prosecution as an accomplice in the commission of that offense, but this fact does not free her from criminal liability with the principal offender in a prosecution for conspiring with him for performance of the operation—the conspiracy being a distinct offense, as to which she is an accomplice. [2] The conspiracy was entered into in California, hence it was immaterial that the conspiracy was to be consummated in Mexico.

A third point was decided—that the physician was entitled to acquittal of the charge of conspiring with his codefendant if an agreement between the two defendants was not proved beyond reasonable doubt, although the physician had promised to assist the women in securing abortions and although the layman contacted the women under circumstances raising a strong suspicion that he did so at the instance of the doctor (238 Pac. 2d 47).

PROBLEM: An experienced hospital laboratory technician correctly typed and cross-matched blood of 2 patients, but mislabeled the containers so that type 2 blood was given during surgery to a patient who needed type 4. The patient died and, in a damage suit against the hospital, a medical witness testified that death was due to the transfusion. Was the hospital liable?

COURT'S ANSWER: Yes.

The Mississippi Supreme Court decided that, regardless of whether the hospital was operated as a charity and whether due care was used to employ a competent technician, the hospital was liable.

The court said that the technician, as an expert, was bound to know that it would be dangerous to use the wrong type of blood, and he was therefore negligent in mislabeling the blood. The hospital, as his employer, was liable if death ensued as a result.

It was not necessary that the evidence conclusively prove that the mistake caused the death, it being sufficient that evidence supporting the medical witness' opinion outweighed opposing evidence that the death could have resulted from another cause (55 So. 2d 142).


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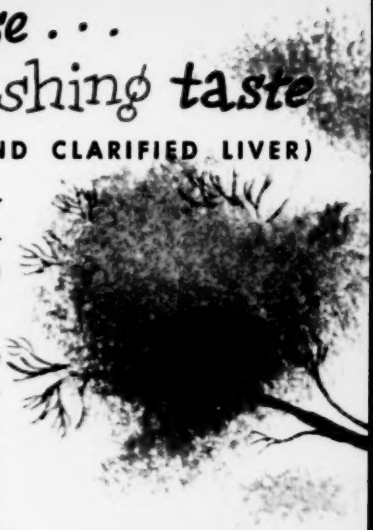
(CRYSTALLINE B_{12} AND CLARIFIED LIVER)



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Armatinic Liquid — a new product of The Armour Laboratories — provides critical factors for an effective hemopoietic response. Armatinic Liquid is well tolerated . . . pleasant-tasting . . . economical . . . and may be given to children as well as to adults. This comprehensive approach to blood regeneration produces gratifying improvement in the blood picture and in symptomatic manifestations.

IN ANEMIA: All hypochromic anemias from pedriatics to geriatrics, macrocytic anemias of nutritional origin, macrocytic anemia of pregnancy, macrocytic anemia of sprue.

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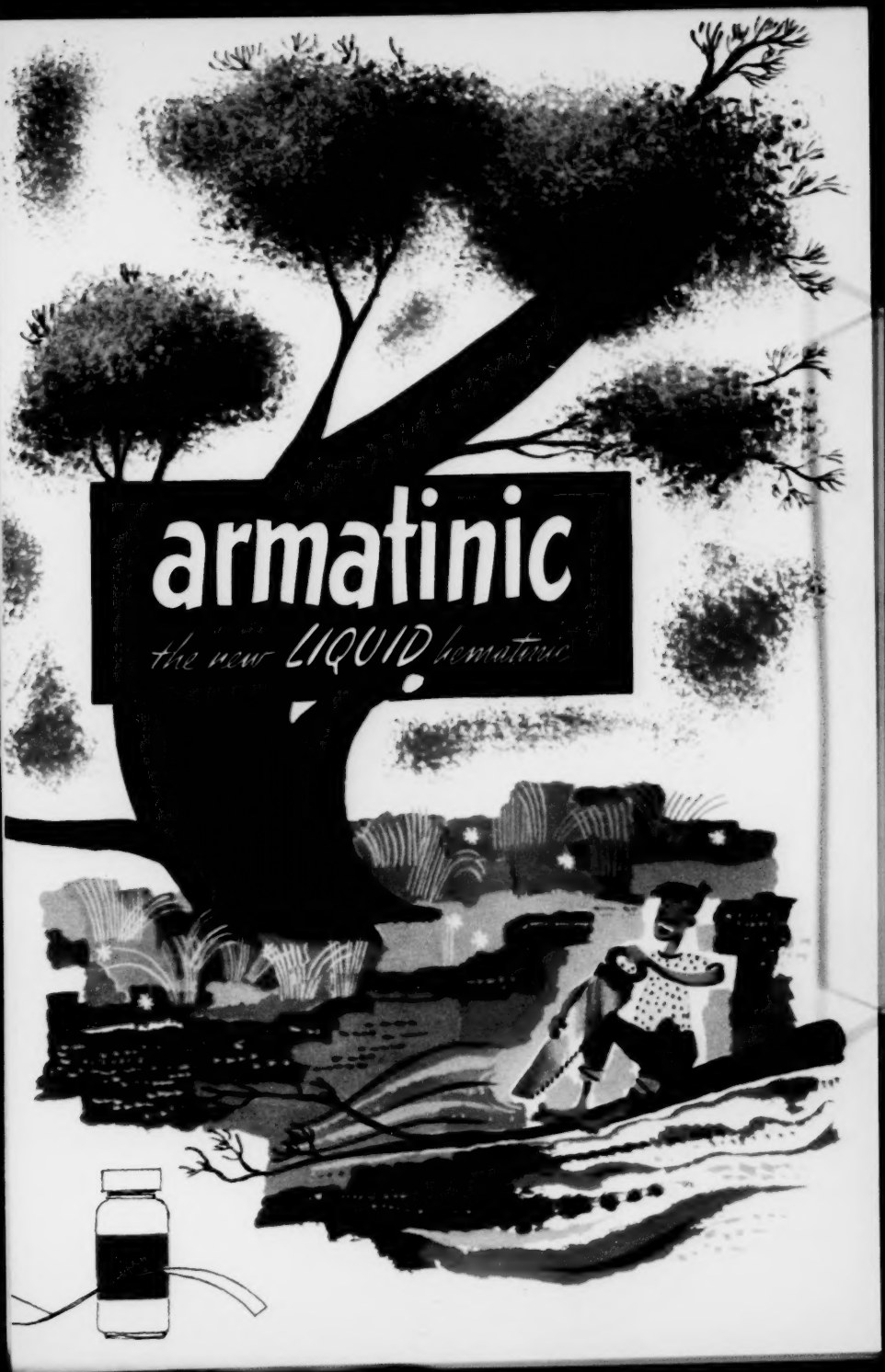
PHYSIOLOGIC THERAPEUTICS THROUGH BIORESEARCH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Comprehensive antianemic therapy with Armatinic Activated Capsulettes assures a more rapid and complete response with a minimum of therapeutic failures. Effective potencies of all hemopoietic factors are obtained. Furthermore, vitamin B_{12} is activated to greater efficacy by the addition of desiccated duodenum, a fact established only recently.

An important advantage of Armatinic Activated is the virtual freedom from undesirable side-actions in the gastrointestinal tract. Indicated in all microcytic anemias and the macrocytic anemias of nutritional origin. Armatinic Activated Capsulettes, *a new product of The Armour Laboratories,* are economical and supply **vitamin B_{12} PLUS ACTIVATOR.**

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world-wide dependability

PHYSIOLOGIC THERAPEUTICS THROUGH BIORESEARCH

LITHO IN U. S. A.

PROBLEM: While a passenger boat was in port at Chicago, a waitress complained of a pain in her hand and believed the cause was an embedded sliver. A second-year medical student was an assistant purser and also acted as ship surgeon in emergencies. He sterilized a razor blade with a lighted match and swabbed the patient's skin and the blade with an 8% formaldehyde-alcohol solution. He made criss-cross incisions 2 mm. deep but was unable to find a sliver. He bandaged the hand and directed that she soak it in a diluted phenol solution. Three days later she went to a nearby hospital. There minor surgery was performed, a drainage tube was inserted through the hand, and cure effected. Was the steamship company liable as for malpractice?

COURT'S ANSWER: No.

The U.S. Court of Appeals, Seventh Circuit, noted that the patient did not claim that the company was negligent in not carrying a doctor on the boat, especially since the boat docked daily near the hospital.

A $4,500 damage award was set aside (192 Fed. 2d 196).

PROBLEM: When arrested by state police for unlawful possession of morphine capsules, accused swallowed them. At a hospital and at the insistence of police officers, a physician pumped accused's stomach against the man's will, disclosing 2 morphine capsules. Was this evidence admissible against accused at his trial?

COURT'S ANSWER: No.

In a decision rendered January 2, 1952, the U.S. Supreme Court decided that defendant's constitutional rights were violated, and his conviction was set aside. But the justices split 6 to 2 as to which constitutional clause was violated. The majority relied on the clause of the Fourteenth Amendment forbidding states to deprive a person of liberty without due process of law. The minority

relied on the clause of the Fifth Amendment exempting an accused person from being compelled to be a witness against himself (72 Sup. Ct. 205).

Associate Justice Douglas pointed out that, under decisions of appellate courts of California, Idaho, Maryland, Nevada, New Hampshire, and New Jersey, evidence obtained by involuntary blood tests and typing, urinalyses, and stomach pumping had been recognized as admissible against accused in various types of prosecutions involving questions of intoxication, venereal disease, and so on. Arkansas, Iowa, Michigan, and Missouri were listed as the only states in which appellate courts had decided that such evidence is not admissible against accused. In some of the cases the question was whether it was proper to show that accused had refused to submit to examination or test.

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COURT'S ANSWER: Yes.

This case was decided by the U.S. Court of Appeals, Fifth Circuit (192 Fed. 2d 167).

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*Am. Prac. 2:850, 1951

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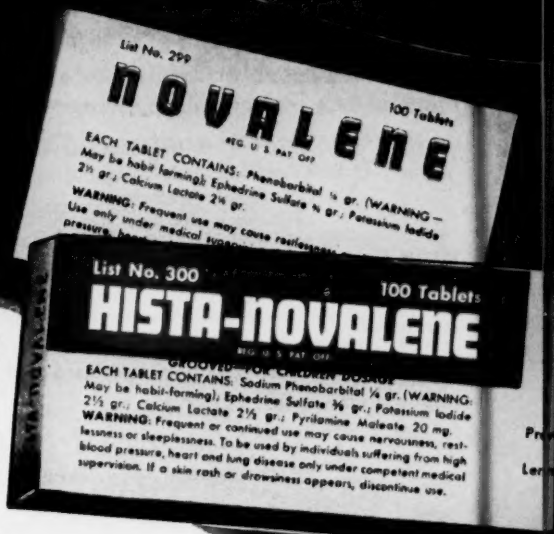

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Therapy for Vascular Headache to Reverse the Physiologic Disturbance

Headache, a problem encountered in all kinds of medical practice, may occur in association with any of a variety of disorders, some organic, others purely functional.

In headaches of organic etiology, e. g. sinusitis, febrile disease, brain abscess — the primary objective is to eliminate the basic disease. Head pain can be relieved temporarily with analgesics, pending diagnosis and definitive treatment.

Functional types of headache present a greater problem, because of the obscure nature of their etiology and their recurrent nature. Among these are:

Migraine (both classical and variant forms)
Tension headache
Psychogenic headache
Histaminic cephalgia

Wolff and his co-workers established that the pain of these headaches is due to disturbance of the tonus of cranial blood vessels — hence the term *vascular headaches.*

The craniovascular changes associated with the several phases of the typical migraine attack are:

VASOCONSTRICTION — to which the visual prodromata are attributable. It is possible to abort the attack during this phase in all but a few cases. (See treatment below.)

SYMPTOMATOLOGY

PRIMARILY VISUAL DISTURBANCES: SCOTOMAS, HEMIANOPIA, UNILATERAL PARESTHESIA, PHOTOPHOBIA.

SPEECH DISORDERS AND MOOD CHANGES: THESE USUALLY LAST FROM A FEW MINUTES TO AN HOUR.

VASODILATATION — as the vessels lose their tone, exaggerated pulsations set in, resulting in the throbbing pain which characterizes vascular headache. Treatment for the attack is still effective during this phase. (See below.)

SYMPTOMATOLOGY

AGONIZING PERIODIC HEADACHE USUALLY LIMITED TO TEMPORAL, FRONTAL OR OCCIPITAL REGIONS.

HEADACHE IS THROBBING IN NATURE, AND IS RELIEVED SOMEWHAT BY PRESSURE ON COMMON CAROTID ARTERY.

VESSEL EDEMA — if the vasodilation continues for too long, vessel walls become edematous; this changes the character of the pain to a steady, intense aching. The attack can now no longer be checked, even with maximum dosage of specific drugs. *Moreover, sustained headache often induces reflex neck muscle tension, a source of residual pain.*

SYMPTOMATOLOGY

THE AGONIZING HEADACHE BECOMES DULL AND STEADY. MAY LAST FOR HOURS OR DAYS.

NAUSEA, VOMITING, DRYNESS OF MOUTH, EXCESSIVE SWEATING, AND CHILLINESS MAY OCCUR DURING THIS STAGE.

Therapy: For maximum success, treatment must follow two lines:

1. Relieve the acute attack — of the numerous drugs which have been tried, ergotamine and its derivative preparations have proved most effective. The *newest product is oral tablets of* Cafergot®, N.N.R. (ergotamine with caffeine 'Sandoz'). When dosage is adjusted to the needs of the individual, Cafergot will give good relief in 85% of cases. It enables a greater number of patients to benefit from early administration since the oral route simplifies treatment as compared to parenteral therapy.

Many migraine patients delay taking medication until the attack has reached its height. Explicit dosage instructions may be forgotten unless the patient is made to realize their importance. To help encourage adherence to correct dosage procedure, Sandoz Scientific Department has prepared pads of INSTRUCTIONS as reproduced below.

For.....Date.....

1. Take 2 tablets at first sign of attack.
2. If the attack continues take one additional tablet every half-hour until attack is terminated.
3. Do not take more than 6 tablets for any single attack or more than 10 tablets in any one week.
4. If attack develops more rapidly or is more severe than usual, take 3 or 4 tablets as early as possible.
5. If you notice any change in your symptoms, report to your physician immediately.

.....M.D.

Do not take tablets between attacks.

2. Reduce the frequency of attacks—psychotherapy and regulation of living habits to avoid fatigue and nervous tension are most effective.

Supplies of Instruction Sheets as shown in facsimile will gladly be sent on request; reprints of recent reports on Vascular headaches are also available.

GENERAL REFERENCES: DeJong, R.: Chicago M. Soc. Bull. *54*: 106, 1951. Friedman, A.: Modern Headache Therapy, St. Louis, C. V. Mosby Co., 1951. Shofstall, C. and Shofstall, W.: J. Kansas M. Soc. *52*: 366, 1951. Wolff, H.: Headache and Other Head Pain, New York, Oxford University Press, 1948.

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Metastasis
—*pain suggests diagnosis*

A Modern Medicine Editorial

About a year after a woman has undergone an operation for the radical removal of a cancerous breast, she may return with pains throughout the thorax, pains which strongly suggest that her nerves are being involved by the neoplasm. Too often today such a woman is sent home without much help because roentgen films failed to show any metastases to the bones or the lungs. This, of course, is not good practice.

All of us, on thinking a moment, must see that metastasis can occur just as well in soft tissues as in bones. A pathologist would remind us that cancer cells commonly grow along the lymph channels in the nerve sheaths and thereby cause severe pain. In many a case such metastasis, which cannot be seen with the roentgen rays, exists for a year or more before lesions appear in the bones or in the lung.

In a case recently seen by me the woman had pain, numbness, tingling, and eventually some muscle atrophy in parts of one arm for two and one-half years before a destructive lesion could be made out in the cervical vertebrae. The autopsy later showed tumor cells growing out along the nerve sheaths in parts of the brachial plexus. During the long illness, the presence of a high red blood sedimentation rate showed that cancer must be widely scattered.

The wise physician will want to start treatment with roentgen rays and perhaps male hormone just as soon as a woman who has had the breast removed returns with root pain. He will feel no need for waiting until the roentgenologist can make the diagnosis for him.

Often also, treatment for metastases must be started when a man comes with a hard nodule in his prostate gland and severe pains throughout the pelvis. One need not wait for x-ray evidence of metastases to the bones. Nothing is to be gained by such waiting.

Occasionally a patient with Hodgkin's disease who, after roentgenologic treatment, went for years without symptoms, returns with symptoms, but no roentgen signs of a relapse. Thus I remember such a patient who came back after seven years to say that he had been fine until a month before when he began to lose weight and to suffer from a severe generalized itching. No tumor could be found anywhere, but on general principles I asked the roentgenologist to irradiate the abdomen. I assumed that there must be a return of the disease somewhere in the abdominal lymphatic system. This hunch apparently was correct because with the treatment the itching disappeared and the man again gained weight and felt well.

WALTER C. ALVAREZ

Management of Peptic Ulcer

Current concepts of gastric physiology relating to therapy, if not to genesis, of duodenal ulcer demand that the erosive action of acid and pepsin in gastric juice be suppressed or abolished.

This objective may be attained by chemical neutralization of the stomach contents, by physical adsorption of excessive acid secretion, by diminishing the area of stomach mucosa which produces hydrochloric acid and pepsin, or by interfering with neurogenic or hormonal responses.

The largest quantum of total stomach secretion results from stimulation of the gastric glands through the vagus nerve by thought, sight, smell, or taste of food or by extraprandial central nervous system excitation. Excision of most of the body and fundus of the stomach, where cells secreting acid and pepsin are located, and of the antrum region, from which the hormonal or gastric phase of stomach secretion is initiated, should and does reduce the concentration of hydrochloric acid

in the gastric juice and concomitantly prevents peptic activity.

Until recently, resection of a sufficient area of the mucosa of the antrum and corpus to accomplish the desired therapeutic purpose was prohibitive because of attendant surgical mortality. Now the mortality rate for subtotal gastric resection done for duodenal ulcer by experienced surgeons is less than 5%. Meanwhile the idea derived from experimental data, that the cephalic, psychic, or reflex phase of gastric secretory activity could be abolished by cutting the vagus nerves at the cardia of the stomach, was applied to human beings.

Actually, if the glandular elements of the stomach mucosa presumably activated by vagal stimulation have been eradicated by resection of the gastric antrum and most of the corpus, cutting the vagus nerve is not significant or important.

But simple section of the vagus nerve above or below the diaphragm does not entail great surgical risk. Unfortunately for the anticipated successful issue, the vagus controls tonicity and motility of the stomach and, when the nerve is severed, gastric secretion may be satisfactorily abated qualitatively and quantitatively, but evacuation of the stomach is also affected. After many simple nerve sections, the number of motility disturbances became disconcerting and gastrojejunostomy adjunctive to vagotomy was recommended.

During this period of trial and error, many patients with peptic ulcer had simple vagotomy, vagus nerve section with gastrojejunostomy, vagotomy with partial or subtotal gastric resection, and partial or subtotal gastric resection without vagotomy.

From this accumulated experience, some principles of surgical procedure are emerging. In the first place, vagotomy should not be the sole surgical therapy of gastric ulcer. And for duodenal ulcer, gastroenterostomy should be performed with vagotomy. The question of whether vagotomy with gastric resection provides assurance of better results than those expected from gastric resection without vagotomy has not been satisfactorily answered. Perhaps the essentials for management of duodenal ulcer are removal of the pyloric antrum and section of the vagus nerves.

JAMES B. CAREY

Circle of Willis

Medical teamwork and good nursing care may restore many victims of stroke to lives of self-sufficiency.

Management of Cerebrovascular Accident

LOUIS FELDMAN, M.D.
Jewish Memorial Hospital, Roxbury, Mass.

GOOD care and intensive retraining after a paralytic stroke will return most patients to former activities or at least to an independent personal life.

Physical therapy should begin early but may be helpful as late as one year after onset or after widespread involvement. The plan outlined by Louis Feldman, M.D., enabled 60 of 82 elderly patients to move about unassisted.

Expert nursing and medical teamwork are required. When cerebral vascular accident is recognized, the internist, neurosurgeon, and physiatrist consult; brain hemorrhage, embolus, or thrombosis is identified, and the course of therapy is arranged.

Oxygen may be administered, and in case of embolism, anticoagulants are given. Ice bags at the head relieve pain and reduce brain hemorrhage. Stellate ganglion blockade may be advisable with thrombosis or embolism, but not with intracranial hemorrhage.

If blood pressure is very high or neck veins are distended or lungs edematous, 500 cc. of blood may be withdrawn. Pressure is also reduced by ½ gr. of sodium nitrite injected under the skin in repeated doses. Clotting is favored by a small dose of morphine or Pantopon, administered when the patient returns to consciousness.

To prevent strain in paralyzed areas, the head and chest should be raised and the body aligned. A triangular pillow is placed in the armpit on the affected side, and the forearm is supported in a sling. A cockup splint on the forearm wards off flexion contracture and stretching of extensors.

Foot or toe drop is avoided by use of a footboard. External rotation of the leg is prevented by the use of sandbags along the outer side. The semirecumbent position makes breathing easier, but the chin should not touch the chest. A loop of braided cord attached to the bed foot aids voluntary movement.

If apoplexy was due to thrombosis or embolism, and no other complications exist, activity may be started twenty-four hours after coma ends. Hypertensive patients must be watched closely and pulse and blood pressure noted repeatedly before actual rehabilitation. After hemorrhage, even bed exercise is delayed two or three weeks.

Physical therapy and rehabilitation are frequently begun in seven to ten days. If the involved limb can be lifted a few inches from the bed, chances of walking are fairly good.

A positive approach to management of cerebro-vascular accident. Geriatrics 6:214-220, 1951.

First, however, the paralyzed individual should be able to concentrate and to understand and remember orders.

Results are poor in cases of malignant hypertension, encephalomalacia, or advanced senility.

Some form of heat treatment should precede all electric stimulation, massage, or exercise. Radiant heat, whirlpool baths, and the Hubbard tank are useful.

The slow sinusoidal current with 20 to 40 contractions per minute is applied to flaccid muscles for almost fifteen minutes daily until voluntary motion is regained.

Passive exercise is done several times a day. Later active assistive and resistive exercises are added. Suspension-pulley therapy is carried out in bed. Deltoid muscle setting, which prevents frozen shoulder and relieves pain, should be done for at least fifteen minutes three times a day.

Sitting on the edge of the bed and standing at the side are practiced for a short time. Walking is started between two sturdy chairs placed back to back near the bed. If the patient is unable to grasp the backs, the weak hand may be bandaged to the chair or fastened with a canvas mitt and straps.

To establish reciprocal motion, the right foot is advanced as the left chair is pushed forward, and vice versa. Arm-swing is taught.

In 60% of cases a double bar, short leg brace with 90° ankle stop is worn to correct toe drop. A long brace with knee stop is needed occasionally for weak quadriceps or unsteady knee.

As the patient's skill improves, parallel bars or walkers are employed. Modified Frankel exercises promote coordination.

The final goal is self-sufficiency. If after nine to twelve months of training some muscles are helpless or contractures persist, surgery may be tried.

Confidence and zest for living should be instilled. In the psychotic, excessive drives are channeled and interest is rekindled by recreational and vocational methods. The individual most completely paralyzed for the first few weeks eventually may make the best recovery.

¶ PULMONARY SARCOIDOSIS recedes with cortisone therapy. In 4 cases studied by Maurice J. Small, M.D., of Veterans Administration Hospital, Brooklyn, great improvement was noted after 100 mg. of cortisone was given daily for four to six weeks. Disappearance of cough, expectoration, and dyspnea was rapid. Pulmonary function tests showed good recovery of vital capacity, breathing capacity, and ventilatory reserve. Beneficial effects of cortisone result from inhibition of connective and granulomatous tissue growth. However, careful observation must accompany cortisone therapy, since cortisone allows rapid progression and dissemination of tuberculous processes and tuberculosis may be associated with sarcoidosis. Simultaneous streptomycin therapy may help prevent such an eventuality.

J.A.M.A. 147:932-937, 1951.

Primary atypical pneumonia is apparently not a specific disease nor of viral origin but is a segmental aspiration pneumonia.

An Explanation of Atypical Pneumonia

PHILIP W. ROBERTSON, M.D.
Royal Infirmary, Liverpool

K. D. FORGAN MORLE, M.D.
University of Liverpool

PRIMARY atypical or virus pneumonia is apparently the result of aspiration of mucus or pus from an infected upper respiratory tract. More than 500 cases in military training camps were so explained by Philip W. Robertson, M.D., and K. D. Forgan Morle, M.D.

The disease varies greatly in duration and intensity. Symptoms consist of fever, a hard cough, raising of sputum, chest pain or referred pain, and rarely dyspnea.

The one constant radiologic feature is anatomic localization to bronchopulmonary segments or subsegments. Lesions generally occupy basal portions of lower lobes, the lower division of the left upper lobe lingula, or the anteromedial portion of the right middle lobe, with occasional additional upper involvement.

Every degree of abnormality is seen, from simple accentuation of bronchovascular markings to dense ground-glass opacity. Collapse within the lesion is very frequent but may not be visible without close inspection. Changes are not specific and can be produced by any cause of segmental de-aeration.

Culture of sputum generally yields only common bacterial flora of the nose and throat.

Several features confirm the theory of aspiration pneumonia:

- Lung involvement is always preceded by an upper respiratory infection, usually a common cold or nasopharyngitis but sometimes tonsillitis, sinusitis, tracheobronchitis, or true influenza.
- Most lesions develop in dependent bronchopulmonary segments or subsegments.
- In many cases, symptoms begin after severe physical exertion during an upper respiratory infection, a fact significant for three reasons.

1] Aspiration is more likely if breathing is rapid and gasping while nasal passages are blocked and the posterior nasopharynx contains mucopus.

2] Affected individuals are usually ambulant, in a position favoring descent of upper respiratory products.

3] The high occurrence rate of pneumonia among recent recruits is explained. Relatively inactive administrative personnel are rarely affected.

- The site of involvement differs if lung disease begins during bed rest. In 5 subjects hospitalized for respira-

An explanation of the "primary atypical pneumonia" syndrome. Brit. M. J. 4738:994-998, 1951.

tory infection who leaned toward the right side to watch the ward entrance, lesions developed in the right middle lobe. Radiologic changes identical with those of atypical pneumonia appear in patients in the surgical wards and are termed postoperative aspiration pneumonia. The same lesions may follow tooth extraction with hemorrhage but no upper respiratory disease.

The great variation in course and degree of illness is inconsistent with the concepts of a specific organism as the etiologic agent but not with that of aspiration as the cause, since inhaled material ranges from clear mucus to heavily infected pus.

Aspiration pneumonia may have serious consequences, including irreversible bronchial lesions. Careful treatment is required. Simple measures such as percussion postural drainage, steam inhalation, and diathermy assist aeration and resolution.

Though widely advocated, antibiotics such as chloramphenicol and aureomycin cannot change mechanical factors and are useful only with a considerable infective element.

Intravenous ACTH for Bronchial Asthma

MAURICE S. SEGAL, M.D., AND J. AARON HERSCHFUS, M.D.

ONE-FIFTH to one-eighth of the dosage of ACTH necessary for intramuscular administration can be successfully employed intravenously in cases of severe bronchial asthma. The method is particularly useful when a patient has become resistant to intramuscular injections.

Maurice S. Segal, M.D., and J. Aaron Herschfus, M.D., of Tufts College, Boston, employ the hormone in a continuous infusion of 5% glucose in distilled water. The rate of flow is 30 drops per minute, or 3 liters in twenty-four hours.

In most cases, 0.5 gm. of aminophylline is added to each liter. For the first two days, 10 mg. of ACTH per liter, or a daily total of 30 mg., is provided. ACTH is then taken only in the first liter, but glucose is continued, with or without aminophylline, until response is satisfactory.

The total dose of hormone ranges from 10 to 210 mg. and the course from one to nine days. Effects are rapid and apparently maintained around the clock.

In 10 cases of severe acute or intractable bronchial asthma, 11 intravenous courses were given. Symptoms were partly or completely relieved in all instances, then recurred to some extent. During one to ten weeks of observation, however, only 2 subjects had serious relapses.

Intravenous ACTH therapy in the treatment of bronchial asthma. Dis. of Chest 20:575-587, 1951.

The margin between an adequate and a toxic dose is an important limiting factor in use of cardiac glycosides.

Gitalin for Congestive Heart Failure

ROBERT C. BATTERMAN, M.D., ARTHUR C. DE GRAFF, M.D., LEONARD B. GUTNER, M.D., O. ALAN ROSE, M.D., AND JOSEPH LHOWE, M.D.

New York University–Bellevue Medical Center and Lenox Hill and Bronx Veterans hospitals, New York City

AMORPHOUS gitalin has a wider therapeutic range than any other digitalis preparation in current use.

Cardiac efficiency is restored in congestive heart failure by amounts that are approximately one-third the toxic dose. Rate of dissipation, uniformity of potency, and predictability are other assets. Gitalin thus appears to be the most satisfactory glycoside for the treatment of congestive heart failure, state Robert C. Batterman, M.D., Arthur C. DeGraff, M.D., Leonard B. Gutner, M.D., O. Alan Rose, M.D., and Joseph Lhowe, M.D.

The therapeutic range of a digitalis preparation is closely related to the severity of the heart disease and the degree of cardiac reserve and of congestive heart failure at the time of digitalization.

After evaluation of therapy for 45 hospitalized and 46 ambulatory patients effects of amorphous gitalin are reported as follows:

Initial amounts used for digitalization vary from 1.5 to 4.5 mg., with the greatest number of patients receiving 1.5 to 2.5 mg. Subsequent doses, administered at six-hour intervals, are continued until therapeutic effect is sustained or toxicity is noted, the amount being between 0.75 and 2.25 mg., usually 0.75 mg.

The best therapeutic dose, causing improvement within twenty-four or forty-eight hours, is between 3 and 10.5 mg., averaging 5.7 mg. The exact amount cannot be predicted in advance. The schedule usually employed is an initial dose of 2.5 mg., then 0.75 mg. every six hours until the desired therapeutic effect is obtained.

For slow digitalization of the ambulatory patient, 1 or 1.5 mg. of amorphous gitalin administered daily completely abolishes all signs and symptoms of heart failure and in three to nine days controls the ventricular rate of patients with chronic auricular fibrillation.

Cumulation is the same with gitalin as with other digitalis preparations but the margin between the therapeutic and toxic quantities is greater. In the cases observed, 7 patients became toxic, evidence of the condition appearing from the seventh to the thirtieth day of therapy.

The daily maintenance dose of amorphous gitalin which either pre-

Studies with gitalin (amorphous) for the treatment of patients with congestive heart failure. Am. Heart J. 42:292-301, 1951.

vents the occurrence of signs and symptoms of congestive heart failure or causes slight indication of toxicity varies. Approximately 73% of patients are maintained by a dose of 0.5 mg. or less.

Most patients given this daily maintenance dose have restoration of good cardiac reserve, the heart attaining an efficiency compatible with the underlying pathologic state. The cardiac reserve can be indirectly measured by the therapeutic range of the digitalis preparation employed. With a good cardiac reserve, the maintenance dose may be doubled without toxicity. With advanced heart disease, however, increase in dosage may not be possible with safety.

The smallest maintenance dose of digitalis leaf is usually approximately two-thirds of a daily toxic dose. With amorphous gitalin, toxicity is manifested when the maintenance dose is doubled.

Preliminary data indicate that the effects of amorphous gitalin are not as persistent as with digitoxin or digitalis leaf and not as rapid as with digoxin or lanatoside C. Type and severity of toxicity with amorphous gitalin are similar to those noted with the other digitalic glycosides.

Aureomycin for Subacute Bacterial Endocarditis

CHARLES K. FRIEDBERG, M.D.

THOUGH not a general substitute for penicillin in bacterial endocarditis, aureomycin may be useful in the following types of case:

- Nonhemolytic streptococcal conditions unaffected by penicillin
- Penicillin-resistant staphylococcic infections
- Endocarditis due to aureomycin-sensitive gram-negative bacilli
- With other antibiotics, when combinations are particularly effective in vitro.

Charles K. Friedberg, M.D., of Mount Sinai Hospital, New York City, evaluated aureomycin in 11 subacute cases. Treatment was begun orally with 4 to 6 gm. daily in divided doses at six-hour intervals, often shortened to three or four hours. The drug was continued five to eight weeks with good response or replaced by other agents.

Nonhemolytic streptococci were isolated from the blood in 8 cases and no organisms in 3. *Streptococcus viridans* was found in 6 instances, *Str. fecalis* in 2.

Infection was eliminated by aureomycin alone in 2 cases with nonhemolytic streptococci and in 2 of unknown type. In 1 instance, penicillin and streptomycin had previously failed.

Usually, however, fever and septicemia disappeared temporarily and returned three to seven days after stoppage of the drug. In 5 cases penicillin or combination therapy was effective; 2 patients died.

Treatment of subacute bacterial endocarditis with aureomycin. J.A.M.A. 148:98-103, 1952.

In general practice, treatment for stasis syndrome consists chiefly of measures to prevent late, disabling complications.

Preventive Measures in Stasis Syndrome

LEON GOLDMAN, M.D.
University of Cincinnati

EARLY therapy for supposedly minor disturbances can often prevent late or disabling symptoms of venous stasis of the legs.

The unit concerned in the development of stasis syndrome is the capillary-venule, perhaps also the arteriole, states Leon Goldman, M.D. The early manifestation is a latent edema, possibly first initiated by failure of the capillaries to remove adequate fluid from the tissues because of by adequate support of the walls and valves of veins and efficient functioning of the capillary network.

Tissue fluid increases because of augmented obstruction of lymph flow and continued filtration of fluid from the arterial end. The stagnant hypoxia of venous congestion may become more severe, progressing to anoxia of endothelium and increased capillary permeability (Fig. 1).

Unless relieved, the high extracel-

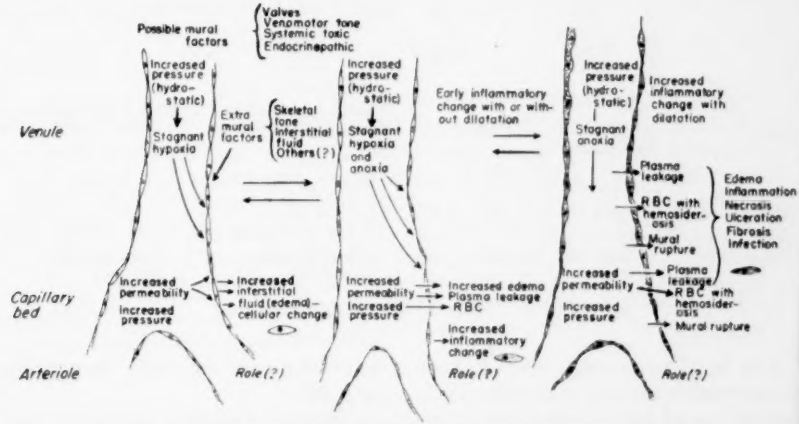


Fig. 1. Progressive development of stasis syndrome

increased intracapillary pressure and despite the osmotic pressure of protein in the capillaries. Increased hydrostatic pressure in the veins when the individual is erect must be met

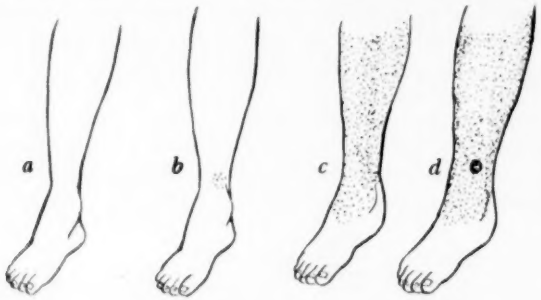
lular fluid volume interferes with function of the tissue cells and may provoke more fibroblastic proliferation because of the high-protein content. The effects of trauma and in-

The prevention of stasis syndrome in the legs. Ohio State M. J. 47:1119-1123, 1951.

fection may be added to the scarring, edema, and necrosis of the late phases of the syndrome.

Patients with stasis usually treated by the general practitioner are those not in need of surgery, those who require preventive treatment after surgery, those with severe complicating dermatitis, or those in far advanced phases of the disease. The basic principles during early phases are to deter advancement of stasis and to care for the involved skin.

After a general physical examination, special attention is given to the lower extremities, with notation of any infection about the feet. If arterial disease is likely, the color, temperature, and pulses of the legs are observed and oscillometric readings are made. Few dilated veins appear in the early phases of the syndrome. Later, dermatitis and brawny induration may obscure the superficial venous system in many areas (Fig. 2). Examination of the skin is



Skin	Smooth and clear	Scaling	Redness, lymphedema, eczematoid dermatitis, ides	Ulcer, lymphedema, eczematoid dermatitis, ides
Petechiae	+	+ +	+ or + +	+ or + +
Hemosiderosis	+ or 0	+ or + +	+ +	+ +
Veins	+ or 0	+ or + + or 0	+ or + + or 0	+ or + + or 0
Subjective	0	Slight pruritus, burning	Pain, burning, pruritus	Pain, burning, pruritus

Fig. 2. Phases of the stasis syndrome

Any local or systemic disease, such as congestive failure, diabetes, pelvic tumor, or phlebitis, may affect the blood or blood vessels or obstruct the blood supply of the legs. Treatment of these factors can help prevent progression of the syndrome. Obesity and a family background of early varicosities are important predispositions to stasis.

a prerequisite to early recognition of stasis.

Local treatment in the initial period is important. Bandages to protect the skin and prevent swelling are usually required. An elastic bandage or stocking is often sufficient, but large sheets of sponge rubber may be needed to achieve adequate pressure.

To reduce heat irritation, the skin may be protected by Lassar's paste and powder and thin cotton stockings.

In the later stages of the stasis syndrome, dermatitis may delay the use of any pressure bandage. Eczematous hypersensitivity often develops from detergents, socks, or stockings and also may be associated with secondary bacterial and mycotic infections. Cleansing at this stage should be done with plain water or colloid materials.

Wet dressings are used, such as Burow's solution, 1 tsp. to ½ glass of water, permanganate 1:5,000, and silver nitrate in 0.25 to 0.5% solutions. In the acute and subacute phase, cortisone can help if no contraindications exist, but a relapse may occur when treatment is discontinued. Rest, elevation, and exercise of the elevated leg while in bed are recommended.

When the vesicular phase subsides, pastes and greases can be used, but pressure bandages or surgery must be deferred until the acute phase has completely passed. No strong antiseptics, antibiotics, or even strong antipruritic agents should be employed until the cutaneous reaction disappears.

Skin ulcers with surrounding irritation should be treated only with wet packs. If irritation is not present, zinc peroxide ointment or red cell powder may be used.

Supplemental employment of tight adhesive bridges across the ulcer, plus pressure sponges and a heavy bandage over the whole leg, often brings improvement. Recurrence can be avoided only by lifetime preventive measures.

¶ COARCTATION OF THE AORTA may be distinguished from other types of obstruction by lack or weakness of pulsations in the abdominal segment. Harris B. Shumacker, Jr., of Indiana University, Indianapolis, reports that terminal aortic thrombosis or severe vasoconstriction can be differentiated from coarctation of the aorta by careful inspection and palpation of the abdomen. The absence or diminution of abdominal aortic pulsation with the latter condition may reveal the diagnosis, although other features of the diseases are similar.

Ann. Surg. 135:111-113, 1952.

¶ ACUTE HERPES ZOSTER may be rapidly relieved by Banthine. Treatment of 2 men and a woman by Hugh S. Brown, M.D., Richard D. Reekie, M.D., and William J. Sinclair, M.D., of Spokane was completely effective, in 1 instance after failure of codeine, Demerol, aureomycin, and several other drugs. From 50 to 100 mg. of Banthine was taken every four to six hours until lesions began to dry and discomfort subsided. No harm resulted in a case of coronary disease.

Northwest Med. 50:432, 1951.

Viral hepatitis must be considered in all cases of jaundice and in many illnesses of acute onset without jaundice.

Diagnosis of Viral Hepatitis

VICTOR M. SBOROV, M.D., AND THEODORE C. KELLER, M.D.
Armed Forces Institute of Pathology, Washington, D.C.

PERSISTENCE of residual symptoms or laboratory evidence indicative of hepatic dysfunction six months or longer after an episode of acute viral hepatitis is evidence of chronic hepatitis. The urine urobilinogen is the test most frequently positive in these cases.

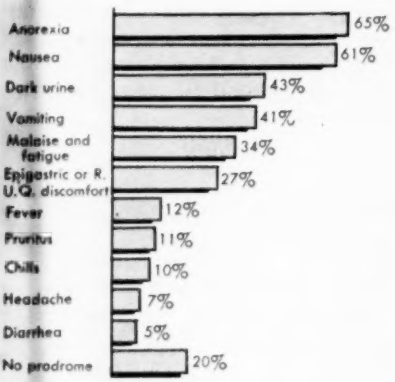


Chart 1. Prodromal symptoms

Approximately 80% of all cases of viral hepatitis have a *prodromal stage* with malaise, fatigue, and gastrointestinal disorders, including anorexia, nausea, vomiting, epigastric distress, abdominal distention, and right upper quadrant ache (Chart 1). The patient may feel a definite distaste for cigarets.

The liver is often tender but not enlarged. Lymphadenopathy, especially of the posterior cervical nodes, is common. The white blood count is usually normal or low with a relative lymphocytosis. Liver function tests may disclose nothing unusual during this stage, but the urine may contain urobilinogen. Tests for bilirubin should be done daily. The prodromal period is usually followed by an interval of three to seven days of relative well being.

In the *acute stage* of hepatitis, dark urine is voided and the vomiting, anorexia, easy fatigability, and lethargy recrudesce. The patient has a toxic and, finally, jaundiced appearance. Bilirubinuria usually occurs one to three days before the jaundice.

During the acute period, the liver is enlarged and extremely tender.

In cases without obvious jaundice, the diagnosis must be sought by laboratory methods. Positive results from all the liver function tests increase in number as the level of serum bilirubin rises.

In a study of 156 patients with acute viral hepatitis seen in the first, second, and third weeks of jaundice and of 17 patients with extrahepatic biliary obstruction, Victor M. Sborov, M.D., and Theodore C. Keller, M.D., found thymol turbidity, cephalin-cho-

The diagnosis of hepatitis. Gastroenterology 19:424-440, 1951.

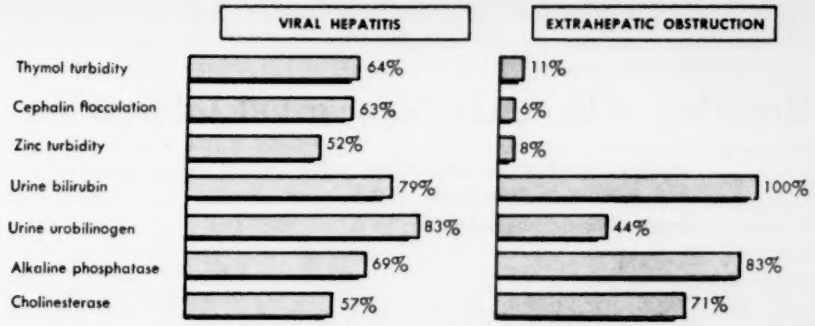


Chart 2. Comparison of results of liver function tests

lesterol flocculation, and zinc turbidity most valuable in the differential diagnosis (Chart 2).

The frequency and severity of recurrence of manifestations of hepatitis depend upon a variety of factors such as physical activity, exposure to hepatotoxins, and intercurrent infections. Because the symptoms are intermittent and often nonspecific, many cases of chronic hepatitis are diagnosed as functional gastrointestinal problems. The course is usually prolonged and may eventually result in hepatic cirrhosis.

In 48 soldiers with chronic hepatitis, the time from onset of the acute initial attack until admission to a specialty center was six to ninety-six months, with an average of thirty months. About one-fourth of the patients had two or more recurrences of jaundice after the original bout of acute hepatitis.

Patients with chronic hepatitis often feel right upper quadrant ache, fatigue easily, and have intermittent nausea, hepatomegaly, liver tenderness, and spider angiomas (Chart 3). Liver function tests should be performed frequently since positive results occur only intermittently and may not correlate with symptoms.

In approximately 30% of cases total serum bilirubin is elevated although clinical jaundice is not common. With either acute or chronic hepatitis, if the laboratory evidence of liver disease is slight, needle liver biopsy is clearly indicated. No correlation exists between the changes in liver structure and the severity of abnormalities found in laboratory tests.

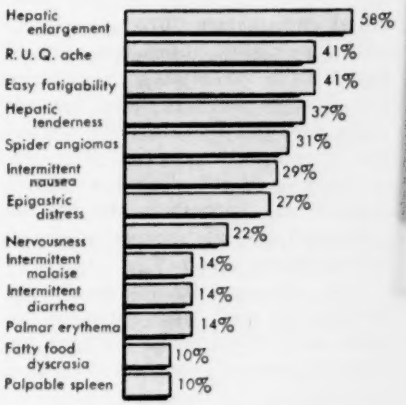


Chart 3. Chronic viral hepatitis. Symptoms and findings in 48 cases.

Routine hospitalization and use of anticoagulant therapy for myocardial infarction may be less important than generally believed.

Mortality with Acute Myocardial Infarction

SAMUEL BAER, M.D., WILLIAM I. HEINE, M.D.,
AND SIDNEY O. KRASNOFF, M.D.
Jewish Hospital, Philadelphia

THE outlook after acute myocardial infarction is not nearly as grave as most patients and many physicians believe.

The number of deaths with first attacks is probably not much above 10%, if the less serious cases managed at home are included with hospital series. Routine institutional care may be less necessary than is now taken for granted.

Impressed with the wide variation in mortality rates with myocardial infarction, ranging from 9 to 51.5%, as reported over the past twenty years, Samuel Baer, M.D., William I. Heine, M.D., and Sidney O. Krasnoff, M.D., decided to find additional information. Private cases of acute myocardial infarction were selected from an electrocardiographic file of 3,100 tracings taken between 1940 and 1950. Evidence of an attack was seen in 182 persons, all treated at home or in the office. For 166 the episode was apparently the first experienced. Serial records were obtained in 130 cases.

Age, sex, and infarction site correspond so well with those of hospital series reported in the literature that statistical comparison seemed justified.

In both types of case, infarction occurred about 3 times as often in men as in women and five to seven years earlier. Males comprised 74% of the private group and their average age was 54 years, in contrast to 61 years for females.

Lesions were anterior a little more often than posterior.

In about half the private series, cardiac examination was completed within the first seventy-two hours after onset, and in 83% within the first week.

Although 35 individuals were eventually sent to the hospital, usually because of inadequate home care, only 1 died after hospitalization.

Only 16, or 8.5%, of the 182 subjects succumbed within the first six weeks of illness. In 5 of the fatal cases the diagnosis was questioned by the invalid or by the referring physician, so that bed rest was not enforced. Half the deaths were sudden and unexpected.

Between 1934 and 1950, approximately the period under review, the average annual death rate for acute myocardial infarction in Jewish Hospital was 34%.

Mortality for the series with home care is among the lower figures reported in America. Depending on

The mortality of acute myocardial infarction in private practice. Am. J. M. Sc. 222:500-503, 1951.

the method of case selection, representative rates for private cases of infarction vary between 2.4 and 11%. An author may cite 5% for first attacks managed outside hospitals and 29% for those in institutions.

Of course, private home cases are less likely to include the emergency types observed in the hospital after collapse on the street or in cardiogenic shock. On the other hand, more and more of the less serious attacks are now recognized as infarction and not seen in hospitals at all.

Old, fully healed myocardial scars are often noted at autopsy and frequently represent benign or completely unsuspected coronary occlusion. If relatively slight involvement were included, published death rates would certainly be lower.

Comparative figures have more than academic interest. Since routine anticoagulant therapy for three to six weeks is an important reason for hospitalization, the current treatment of acute myocardial infarction should be reevaluated.

Flat Fingernails with Cirrhosis of the Liver

JULIUS KLEEBERG, M.D.

In some cases of hepatic cirrhosis, the fingernails flatten without change in the fingertips, muscles, or bones, as in hippocratic deformity. Malnutrition may be responsible, believes Julius Kleeberg, M.D., of the Medical School and Hadassah Hospital, Jerusalem.

Initially one finger is affected, usually the thumb, then the first and middle fingers. Nails may be even and smooth or lined with age, and flatness persists even with long parallel grooves.

In 10 cases, three common features were observed: prolonged advanced cirrhosis, positive results from liver tests with high gamma globulin, and hemoglobin at the lower normal limit.

In all instances diet had been deficient for some time, owing to loss of appetite, abdominal pain, low social and economic status, abuse of nicotine and alcohol, or poor absorption with ascites. Flat fingernails were also seen in a perfectly healthy man who in boyhood was confined to a vegetarian diet.

Both sexes were affected, ages ran from 35 to 65 years, and races were English, Arabian, Polish-Jewish, and Oriental-Jewish.

The type of cirrhosis was not a factor, as causes included alcoholism, cholangitis, hemochromatosis, virus hepatitis, and Banti's syndrome.

Nails were not spatulate, concave, or brittle and tender, as with anemia, and could not be improved by iron or antianemic therapy.

Records were kept by making casts.

Flat finger-nails in cirrhosis of the liver. Lancet 261:248-249, 1951.

Acceleration of metabolic activity may be due to any of a large number of physical or physiologic factors.

Extrathyroidal Hypermetabolism

MAURICE BRUGER, M.D., AND VINCENT P. HOLLANDER, M.D.
New York University Post-Graduate Medical School, New York City

PATIENTS with elevated basal metabolic rates, but in whom diagnosis of hyperthyroidism has been precluded by careful study, present an exceedingly complex problem.

Since basal metabolism is the sum of the rates of oxygen consumption of all the body cells and these are controlled by physical, humoral, endocrine, pharmacologic, and vegetative as well as central neural factors, the complexity is understandable but nonetheless bewildering.

To remind the practitioner of the many clinical, physiologic, and physical factors that should be investigated, Maurice Bruger, M.D., and Vincent P. Hollander, M.D., have prepared the following outline:

FACTORS CAUSING EXTRATHYROIDAL HYPERMETABOLISM

Disorders of Endocrine System
1] Disorders of Pituitary Gland
  Acromegaly
  Basophilic adenoma
2] Disorders of Adrenal Gland
  Medullary tumors (pheochromocytoma)
  Cortical tumors

Disorders of Hematopoietic System
1] Anemia
2] Polycythemia
3] Leukemia

Disorders of Collagen System
1] Dermatomyositis
2] Disseminated lupus erythematosus

Disorders of Circulation
1] Congestive failure
2] Essential hypertension (?)
3] Aortic stenosis
4] Arteriovenous aneurysm

Neoplastic Disorders
1] Malignant tumors with or without metastases
2] Multiple myeloma
3] Hodgkin's disease
4] Lymphosarcoma

Disorders of Skin
1] Diffuse erythrodermas

Disorders of Nervous System
1] Hypothalamic disturbances
2] Cortical disturbances
3] Motor disturbances

Disorders of Osseous System
1] Paget's disease of bone

Hemochromatosis

Drugs
1] Thyroid (thyrotoxicosis factitia)
2] Thyroxine
3] Epinephrine
4] Ephedrine
5] Caffeine
6] Histamine
7] Dinitrophenol
8] Aminophylline

Pregnancy

Fever
1] Infections
2] Drugs (tetrahydronaphthylamine)

Technical Errors
1] Oxygen loss
  Mechanical
  Perforated eardrums
  Aerophagia
2] Forced hyperventilation
3] Voluntary changes in chest capacity
4] Discomfort of patient
  Salivation
  Pain

Extrathyroidal hypermetabolism: classification and discussion including three illustrative case reports. Ann. Int. Med. 35:1260-1275, 1951.

Clues to cause of coma often lie in history preceding accident or in the circumstances in which the patient was found.

Differential Diagnosis of Coma

ROSCOE L. PULLEN, M.D.
Tulane University of Louisiana, New Orleans

WHEN a patient is seen in a state of coma, immediate effective therapy can be started if the examiner adheres to a diagnostic routine. Such a procedure is outlined by Roscoe L. Pullen, M.D., as follows:

Among emergency admissions, the most common *causes* of coma should be recalled. These are alcoholism, 60%; trauma, 10 to 13%, with fractured skulls accounting for about two-thirds, and head injuries one-fifth of cases; cerebral vascular accidents, 10%; and poisonings, 5 to 10%. In the latter, attention should be directed to barbiturates and morphine.

Other causes of coma in order of numerical importance, but each comprising less than 3% of cases, are epilepsy, diabetes, meningitis, pneumonia, cardiac decompensation, exsanguination, uremia, eclampsia, heat exhaustion or retention, and various miscellaneous factors.

Most important for diagnosis is the *history* preceding the accident or the circumstances in which the patient was found.

The following points should be ascertained if possible: type of onset or injury, whether convulsions occurred, possible pregnancy, any preceding illness, infection, headaches, nausea, vomiting, or abnormalities of speech, hearing, vision, locomotion, memory, or equilibrium.

In the absence of a history, *physical examination* is the basis for diagnosis.

Convulsive movements and abnormal positions of the limbs appear with epilepsy or brain tumor. The scalp and cranial orifices should be inspected for contusions, lacerations, and evidence of fracture.

Cherry-red or rosy skin color is diagnostic of carbon-monoxide poisoning. Cyanosis is typical of severe head injuries, pneumonia, pulmonary edema, pronounced diabetic acidosis, and epileptic seizures. Flushed face may occur with early diabetic acidosis, alcoholic coma, and intracerebral hemorrhage; pallor with essential hemorrhage and cardiac syncope.

A cold clammy skin may result from hyperinsulinism, morphine poisoning, shock secondary to perforated viscus, myocardial or pulmonary infarction, or acute meningococcemia. Dehydration of the skin is common with alcoholism, uremia, and diabetic acidosis. Petechiae of the skin, nail beds, conjunctiva, and mucous membranes may indicate cerebral embolism. Bilateral dependent edema indicates cardiac, renal, or hepatic insufficiency.

Pulse—A weak, thready pulse is

The differential diagnosis of coma. South. M. J. 44:921-925, 1951.

characteristic of shock. Slowness of pulse is typical of freezing, morphine poisoning, and Stokes-Adams syndrome.

A slow, bounding pulse indicates increased intracranial pressure from tumor, hemorrhage, trauma, or advanced meningitis. A full, bounding pulse occurs with acute infections, thyrotoxic storm, and congestive heart failure; an irregular one with cardiac arrythmias.

Respiration—Acute infections, pulmonary edema, and chronic pulmonary disease are associated with rapid breathing. Air hunger or Kussmaul breathing indicates acidosis.

Increased intracranial pressure, morphine poisoning, and freezing produce slow respiration. Stertorous breathing is heard with cerebral hemorrhage. Cheyne-Stokes breathing occurs during arteriosclerotic and hypertensive heart disease, chronic nephritis, and increased intracranial pressure.

Temperature—Most comatose patients have fever, but temperature may be depressed in shock, morphine poisoning, and freezing.

Blood pressure—Elevated blood pressure indicates cerebral hemorrhage, hypertensive encephalopathy, uremia, or congestive heart failure as the cause of coma. Blood pressure frequently falls in acute myocardial infarction and cerebral hemorrhage.

Odor—Alcohol on the breath should not deter examination for an associated head injury. Acetone odor should suggest diabetic acidosis, ammoniacal odor, uremia. The characteristic smell of poisonous agents such as cyanide, lysol, phenol, or illuminating gas may be detected.

Eyes—Conjugate deviation is often seen with pontine and frontal lesions. The pupils are unequal in unilateral cerebral lesions but are dilated in alcoholism, cerebral hemorrhage, and barbiturate and belladonna poisoning and constricted in morphine poisoning and pontine hemorrhage.

Papilledema of the fundus appears with increased intracranial pressure. The eyeballs are soft during diabetic acidosis. Corneal reflexes disappear in deep coma. Rolling of the eyes or resistance to raising the lids suggests hysteria.

Association of ptosis, pupillary abnormalities, deviation of the eyes, or bruit may indicate specific neurologic syndromes. The patient's fundus should be examined for hemorrhages, exudate, or vascular abnormalities indicating hypertensive, arteriosclerotic, diabetic, or albuminuric retinopathy.

Face—Evidence of paralysis may be seen on the face. Bleeding, laceration, or old scars of the tongue are suggestive of epilepsy.

Neck—Stiffness of the neck is evidence of meningeal irritation from meningitis or subarachnoid hemorrhage; elicitation of Kernig's and Brudzinski's signs may be confirmatory.

Trunk—Heart and lungs should be examined carefully for evidence of organic disease. The abdomen is rigid with perforated viscus and peritonitis or ruptured ectopic pregnancy. Uterine enlargement and other signs of pregnancy confirm a ruptured ectopic pregnancy. Epileptic patients have urinary and fecal incontinence during coma.

Extremities—Even during coma,

differences in tonus may be detected in paralyzed and nonparalyzed sides. Hyperinsulinism may induce bilateral hyperactive and positive Babinski's reflexes.

After physical examination, the next most important diagnostic technics for a comatose patient are *lumbar puncture* and examination of cerebrospinal fluid. Pressure, dynamics, cellular composition, chemistry, and bacteriology of the cerebrospinal fluid are considered.

Other laboratory investigations include [1] gastric lavage for all poisoning and for severe alcoholism, [2] catheterization and complete urinalysis, [3] routine blood studies, and [4] tests of the blood in nontraumatic patients for serologic data and nonprotein nitrogen determinations.

Roentgenologic studies are directed toward recognition of skull fracture, atrophy or enlargment of the sella turcica, displacement of the pineal gland, erosion, thickening or increased vascularity of the skull tables, and calcifications indicative of certain tumors.

Skull roentgenograms should be made whenever a comatose patient is admitted to the hospital, unless he is in a state of shock. Roentgenograms of other parts of the body such as the chest may be helpful in establishing systemic illness of various types such as pneumonias, metastases, cardiac disease, and the like.

¶ TUBERCULOSIS affects about 8% of diabetics, twice the rate for apparently healthy industrial workers of comparable age, race, and sex. A survey made by Katharine R. Boucot, M.D., and associates of the Woman's Medical College, University of Pennsylvania, and Philadelphia Tuberculosis and Health Association discloses more active infection in diabetics under the age of 40 and also in those with severe disease requiring over 40 units of insulin daily. Although diabetic patients are commonly urged to reduce weight, incidence of tuberculosis is doubled among patients below standard weight as compared with those who are overweight.

Am. Rev. Tuberc. 65:1-50, 1952.

¶ ELECTROCARDIOGRAPHIC ABNORMALITIES may result from a patient's anxiety during the test and not appear in subsequent examinations after reassurance and rest. Heinz Magendantz, M.D., and Joseph Shortsleeve, M.D., of Boston report 22 cases in which RS-T segment deviations and low or diphasic T waves seen in the original tracings were completely reversed the next day when the patients had been reassured and rested. Many of the patients had neurocirculatory asthenia or other psychiatric disorder. The interpreter, therefore, should avoid making a diagnosis of heart disease on the sole evidence of such single electrocardiographic tracings.

Am. Heart J. 42:849-857, 1951.

Irritable colon, gallbladder disease, and peptic ulcer frequently coexist; careful diagnosis is therefore essential before therapy is started.

Diseases Associated with Irritable Colon

EDWARD J. DONOVAN, M.D., AND SARA M. JORDAN, M.D.
Lahey Clinic, Boston

PATIENTS with gallbladder disease or peptic ulcer often have irritable colons as a complication.

Because of the frequent coexistence of the three conditions, symptoms must be carefully analyzed before therapy for one of the lesions is started, warn Edward J. Donovan, M.D., and Sara M. Jordan, M.D. Cholecystectomy alone will not cure a patient who also has chronic peptic ulcer nor will medical management of a patient with persistent gastrointestinal symptoms alleviate the difficulty if gallstones are contributory.

The most common cause of gaseous dyspepsia is aerophagy or colonic and small intestinal dysfunction, not gallstone disease.

Four conditions in the gallbladder require surgical intervention. These are: [1] cholecystitis with stones, [2] acute, sometimes gangrenous cholecystitis without stones, [3] papillomas, and [4] carcinoma.

Nearly all patients who have cholecystectomies for cholelithiasis with typical attacks of biliary colic have satisfactory results. However, only about half the persons who have gallbladders removed because of chronic noncalculous cholecystitis with dyspeptic symptoms but without biliary colic are benefited to the same degree. Before surgical intervention, the patient's symptoms should be carefully analyzed to determine to what extent gallstones or associated abnormalities such as achlorhydria, diverticulosis, irritable colon, or peptic ulcer are responsible for the distress.

Failure of the gallbladder to fill with dye and consistent irregular shadows within the gallbladder wall are essential for a diagnosis of gallbladder disease by the Graham-Cole test. Intravenously administered dye should always be used if the gallbladder does not fill after the dye is given orally. Nonvisualization indicates failure of absorption or failure of gallbladder function.

Functional failure may be due to organic disease in the gallbladder or to a temporary factor, probably spasm of the sphincter of Oddi, which is relieved when the cause outside the gallbladder is corrected. Such causes include an acute duodenal ulcer or, more commonly, an acute irritable digestive tract. When the conditions subside, subsequent cholecystograms show adequate filling of the gallbladder.

The effect of duodenal irritability on the function of the gallbladder may possibly contribute to the stasis

The irritable colon as a complication of disease of the gallbladder and peptic ulcer. Rocky Mountain M. J. 48:942-944, 1951.

of bile within the gallbladder and the formation of gallstones. Cholecystectomy does not cure an irritable digestive tract, and symptoms will return unless this disorder as well as secretory abnormalities are treated after the operation.

Similarly, neither a peptic ulcer nor an irritable colon can be treated satisfactorily by medical management when the patient has gallstones. Even if colic has not occurred, cholecystectomy should be done if gallstones are demonstrated in such cases.

In the pre- and postoperative management of individuals with diseased gallbladders some fat, if not in the form of fried foods, may be included in the diet. Usual amounts of cream and butter in an otherwise easily digestible meal are innocuous. Duodenal irritability is prevented by the use of bland, easily digestible food.

Finally, studies to exclude a duodenal ulcer in people thought to have a colonic or intestinal dysfunction are important for several reasons. First, the two conditions may coexist. Second, duodenal ulcer occasionally produces pain in the lower abdomen. Third, the irritable colon is not infrequently associated with epigastric pain relieved by the taking of food.

Spontaneous Thrombophlebitis

PAUL T. DE CAMP, M.D., AND ASSOCIATES

THROMBOEMBOLIC disease of the venous system may occur alone and should be considered an entity, not merely a complication of other disorders.

The condition is primary in 4.5% of cases, estimated Paul T. De Camp, M.D., Rudolph M. Landry, M.D., and Alton Ochsner, M.D., of Tulane University, New Orleans, and Michael E. DeBakey, M.D., of Baylor University, Houston. Between 1938 and 1951 at the Ochsner Clinic and Charity Hospital, 90 instances of thrombophlebitis without previous infection, trauma, heart failure, cancer, operation, or other apparent cause were observed.

Spontaneous thrombophlebitis has a higher rate of bilateral and right lower leg involvement, superficial location, and recurrence than secondary forms. Pulmonary embolism is unusual, indicating that the disease is the nonsuppurative inflammatory type.

Onset may be acute, subacute, or insidious. Slight to severe pain is generally felt, and fever develops in more than half the cases. Edema and tenderness are usually but not always present.

The affected limb is wrapped in elastic bandage, and painful vasospasm is relieved by one or more procaine injections of sympathetic nerves. Heat is applied and the limb is raised at intervals.

Spontaneous thrombophlebitis. Surgery 31:43-54, 1952.

The treatment of acute intestinal obstruction in children differs from that required for the condition in adults.

Acute Intestinal Obstruction in Children

MARSHALL L. MICHEL, JR., M.D.,
AND MARION LEE JARRELL, M.D.
Tulane University of Louisiana, New Orleans

OBSTRUCTION of the intestinal tract in children is most commonly of the small bowel.

Intussusception is almost the only cause of colonic obstruction, and is responsible for about 40% of small bowel blockage.

Marshall L. Michel, Jr., M.D., and Marion Lee Jarrell, M.D., emphasize that modifications of therapy used for adults and special precautions are needed for management of obstructions in children.

INTUSSUSCEPTION

The first measure in treatment of intussusception should be improvement of the child's physical status, which is usually depleted by shock brought on by severe pain and loss of blood into the intestinal lumen. Whole blood is of utmost importance preoperatively; transfusions should be continued during the operation.

A right-sided incision is preferred, either paramedian or transverse, even if the invagination extends into the left colon. Reduction is done unless the condition of the bowel wall requires resection. All manipulations should be gentle.

Reduction is effected by a milking action on the intussuscipiens, not by a pulling action on the intussusceptum. In difficult reduction of ileocolic invagination through the ileocecal valve, the maneuver is expedited by Sawyer's method of manual dilation of the ileocecal valve.

Treatment of primary intussusception should be limited to simple reduction; attempts to fix the cecum or terminal ileum may be harmful. In secondary intussusception, the precipitating lesion is removed at the primary operation rather than later.

CONGENITAL OBSTRUCTIONS

External hernia is, next to intussusception, the chief cause of small bowel obstruction and is almost invariably inguinal. Because of the high mobility, small caliber, and thin wall of the terminal ileum on the right, the ileum and cecum are usually the structures found in an inguinal hernia of a very young child.

All that is necessary is reduction of the hernia, high ligation, and excision of the sac. This can be done through a small transverse incision along the suprapubic fold.

Unless surgery is urgent, preliminary reduction by conservative measures is advisable. This is usually accomplished by elevating both the child's legs and applying heat and gentle taxis after sedation. An elec-

Acute intestinal obstruction in infants and young children. Am. Surgeon 17:1040-1056, 1951.

tive surgical procedure can be performed within a few days.

If the incarcerated hernia cannot be reduced without operation, an oblique incision gives the best exposure of the inguinal canal, though a transverse or right paramedian incision is necessary if concurrent abdominal exploration is desirable.

Since most umbilical hernias disappear spontaneously within the first year of life, elective hernioplasty is delayed until the child is over 1 year old. Adhesive strapping does no good, often irritates the skin, hampers bathing, and may conceal incarceration. When operation must be done, a curved subumbilical incision is used to preserve the cutaneous umbilicus.

ATRESIA AND STENOSIS

If a newborn child vomits bile, atresia of the intestine should be suspected. The obstruction results from a developmental defect in which part of the intestinal tract fails to canalize. Diagnosis is made by scout film; Farber's test of the meconium will show lack of epithelial cells. Side-to-side anastomosis around the site of the atresia is usually life saving but must be done early.

With stenosis, canalization is incomplete. Atresia becomes evident soon after birth; stenosis is usually manifest later, sometimes not for a year or more.

MALROTATION

With complete rotation, bowel obstruction occurs by direct pressure of the cecum on the duodenum and by pressure of the peritoneal bands overlying this portion of the bowel.

When the intestine does not rotate properly, the mesentery of the midgut frequently has only a short, rudimentary attachment to the posterior abdominal wall. Volvulus of the entire midgut occurs with obstruction at the duodenojejunal junction and compression of the superior mesenteric vessels.

With malrotation and extrinsic duodenal pressure, vomiting of bile, the most typical symptom, is present from birth. If the obstruction is incomplete, stools are passed, and Farber's test reveals epithelial cells. Scout roentgenograms show distention of stomach and duodenum, with little or no gas in the lower bowel. When the diagnosis is in doubt, barium enema will verify incomplete rotation of the cecum. Barium must not be given by mouth.

The peritoneal folds holding the bowel in the upper right quadrant are severed, so that the cecum and ascending colon can move to the left side of the abdomen. Further exploration is necessary to be certain that midgut volvulus is not associated with the malrotation. When midgut volvulus occurs alone, the entire midgut must be delivered outside the abdomen and the volvulus corrected by rotating the bowel in a counterclockwise direction.

INTESTINAL DUPLICATION

Enteric cyst is a spheric or elongated hollow structure intimately attached to some portion of the intestinal tract. The duplication is lined by mucous membrane. The symptoms are usually chronic and intermittent and a mass is palpable. Complete obstruction may occur.

Anatomic communication between the three middle fingers and the ulnar bursa may permit spread of suppurative tenosynovitis.

Tendon Sheath Patterns in the Hand

E. W. SCHELDRUP, M.D.
University of Iowa, Iowa City

ULNAR bursal involvement is a hazard when the middle fingers are affected by suppurative tenosynovitis, although the anatomy of the hand as depicted in most textbooks would indicate that the spread of such infection is practically impossible.

The inflammation may necessitate surgical intervention, the results of which are notoriously poor for acute suppurative conditions of the flexor tendon sheaths of the hand. Knowledge of the variable anatomy involved is therefore most important.

According to classical concepts, the flexor tendon sheath of the little finger, but not of the three middle digits, has continuity with the ulnar bursa. Communications between the middle fingers and the bursa are considered either nonexistent or anatomic curiosities.

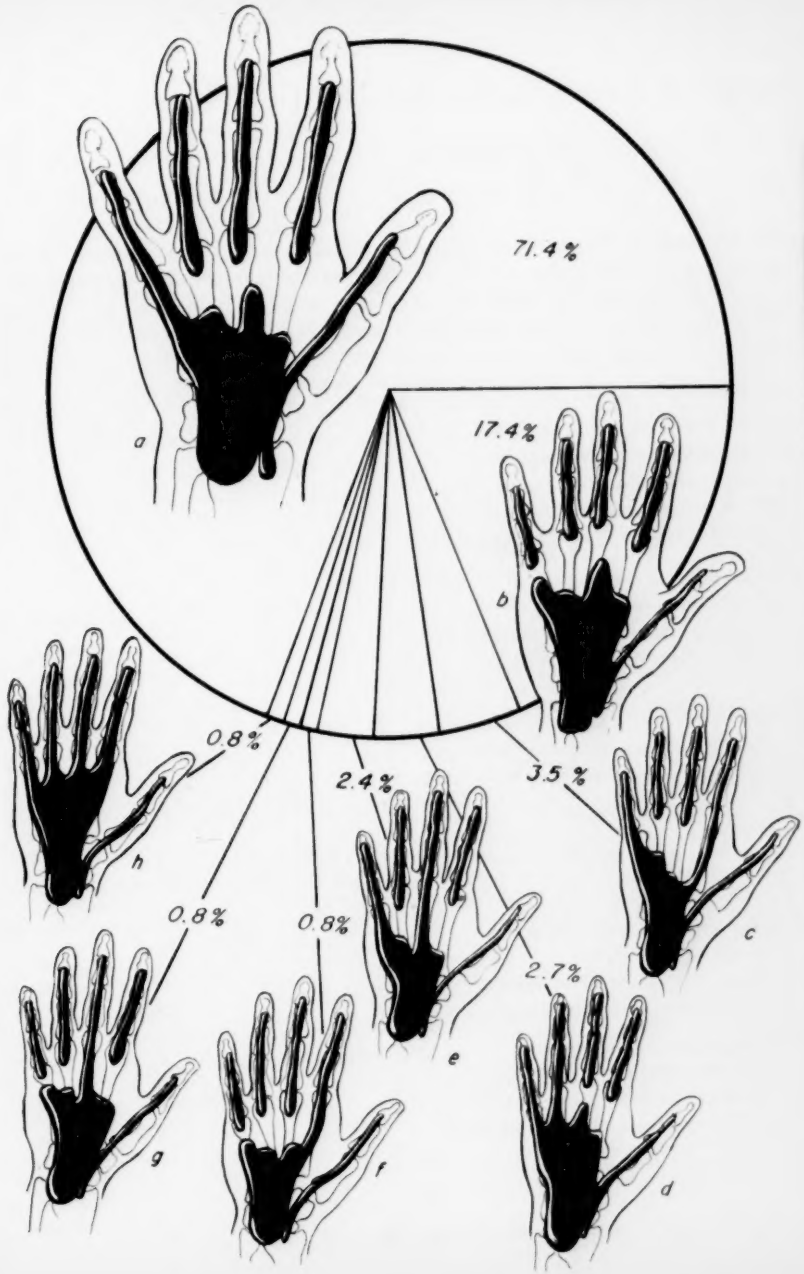
However, E. W. Scheldrup, M.D., refutes this theory with evidence from air inflation studies of the sheaths and bursal configurations in 367 dissected hands. The inflation procedure, which requires little pressure and so does not rupture the sheaths or palmar bursae, gives a more accurate delineation than the usual injection of substances of thick consistency.

- The generally accepted anatomic pattern of communication in the hand appeared in only about 71.4% of cases (Fig. *a*).
- No communication was found between the flexor tendon sheaths and the ulnar bursa in 17.4% (Fig. *b*).
- Definite communications to the tendon sheaths of the little and index fingers, but not to the other two fingers, showed in 3.5% (Fig. *c*).
- Communications to the little and ring finger tendon sheaths but not to the middle and index fingers were noted in 2.7% (Fig. *d*).
- The little and middle fingers but not the ring and index fingers communicated with the ulnar bursa in 2.4% (Fig. *e*).
- A connection between the index finger only and ulnar bursa, between the middle finger only and ulnar bursa, and between all the flexor tendon sheaths and the ulnar bursa was observed in 3 hands each (0.8%) (Fig. *f*).

These patterns show that eight separate and distinctly different types of anastomoses occur and corroborate the reports of spread of infection that have been appearing in the literature. Physicians should anticipate not only the possibility of infectious diffusion to the ulnar bursa whenever a tendon sheath is inflamed, but also that bursal involvement may similarly spread to a digit.

Tendon sheath patterns in the hand. Surg., Gynec. & Obst. 93:16-22, 1951.

Tendon Sheath Patterns in Hand



Results of various surgical treatments employed for duodenal and gastrojejunal ulcer are tabulated and compared.

Surgical Procedures for Peptic Ulcer

SARA M. JORDAN, M.D.
Lahey Clinic, Boston

THE American Gastroenterological Association is attempting to resolve the surgical therapeutic problems of peptic ulcer. Probably the most important question is whether vagotomy is of value as an additional procedure in duodenal ulcer and as a sole measure in gastrojejunal ulcer.

Consequences and sequelae of different operations done for treatment of between 3,500 and 4,000 duodenal and gastrojejunal ulcers are reported by Sara M. Jordan, M.D., chairman of the Subcommittee on Surgical Procedures in Peptic Ulcer of the American Gastroenterological Association.

TABLE 1. SATISFIED WITH OPERATION

	PER CENT
Without previous hemorrhage	
1. Gastric resection	93.9
2. Gastric resection plus vagotomy	96.9
3. Gastroenterostomy plus vagotomy	94.0
With previous hemorrhage	
1. Gastric resection	91.5
2. Gastric resection plus vagotomy	94.8
3. Gastroenterostomy plus vagotomy	93.2

TABLE 2. CLINICALLY FREE OF ULCER SYMPTOMS

	PER CENT
Without previous hemorrhage	
1. Gastric resection	95.6
2. Gastric resection plus vagotomy	96.8
3. Gastroenterostomy plus vagotomy	71.7
With previous hemorrhage	
1. Gastric resection	96.4
2. Gastric resection plus vagotomy	96.1
3. Gastroenterostomy plus vagotomy	83.8

Report of the chairman of the Subcommittee on Surgical Procedures in Peptic Ulcer of the American Gastroenterological Association. Gastroenterology 19:599-604, 1951.

TABLE 3. RECURRENT ULCER BY X-RAY AFTER OPERATION

	PER CENT
Without previous hemorrhage	
1. Gastric resection	1.6
2. Gastric resection plus vagotomy	1.3
3. Gastroenterostomy plus vagotomy	2.4
With previous hemorrhage	
1. Gastric resection	2.2
2. Gastric resection plus vagotomy	1.4
3. Gastroenterostomy plus vagotomy	3.6

Statistics in Tables 1 to 5 cover observations eighteen months to three years after operations for duodenal ulcer.

On the basis of these data, vagotomy combined with gastric resection for duodenal ulcer apparently does not provide subjective or objective improvement over what may be expected from resection alone; and subtotal gastric resection, with or without vagotomy, assures better control of duodenal ulcer than does vagotomy combined with gastroenterostomy.

The low mortality rate of vagotomy with gastrojejunostomy may be, in some cases, favorably compared with the surgical risk of gastric resection.

For gastrojejunal ulcer, subtotal gastric resection, when indicated and possible, is more satisfactory than simple vagotomy.

TABLE 4. CRITERIA

1. Clinically free of ulcer symptoms
2. Satisfied with operation
3. Able to work or perform usual duties
4. Absence of recurrent ulcer by x-ray
5. Absence of hemorrhage in follow-up

TABLE 5. COMBINED CRITERIA

	PER CENT
Without previous hemorrhage	
1. Gastric resection	86.2
2. Gastric resection plus vagotomy	87.2
3. Gastroenterostomy plus vagotomy	80.3
With previous hemorrhage	
1. Gastric resection	87.3
2. Gastric resection plus vagotomy	85.0
3. Gastroenterostomy plus vagotomy	75.0

To reduce a large sliding hernia of the large bowel, the abdominal approach is preferable to the inguinal.

Repair of Sliding Hernia of the Colon

AMOS R. KOONTZ, M.D.
Johns Hopkins University, Baltimore

LA ROQUE'S abdominal approach facilitates operation for sliding hernia of the large bowel.

Recurrence after repair is more frequent when ordinary herniorrhaphy is done because an attempt is usually made to replace the involved bowel into the peritoneal cavity working only from below, states Amos R. Koontz, M.D. Reduction is often incomplete.

LaRoque advocated an abdominal approach to all inguinal hernias through a muscle-splitting incision about an inch above the internal ring. After the sac is dissected free, a finger is placed in the sac from within the abdomen and the hernia is reduced from both above and below.

This method is especially applicable to huge sliding hernias or to recurrent hernias with greatly distorted anatomy associated with scar tissue. The exact location of the sac is often not immediately apparent by the inguinal approach alone.

The diagnosis of sliding hernia before operation is not easy, but the condition should be considered if complete reduction is difficult or cannot be maintained by pressure; diagnosis by a barium enema is unnecessary.

When a sliding hernia is likely, the sac should be opened anteriorly to keep from entering the bowel which forms part of the posterior wall of the sac. In dissecting the bowel free, the mesenteric vessels should not be injured. Complete reduction of the bowel through the internal ring is often difficult or impossible.

Time is saved by making an immediate LaRoque incision above the internal ring, entering the abdominal cavity, and determining with a finger through the opening the exact location of the sac and the relationship to other structures (Fig. *a*). The procedure may prevent injury to the bowel or bladder and permits evaluation of the strength of the fascial structures forming the floor of the canal.

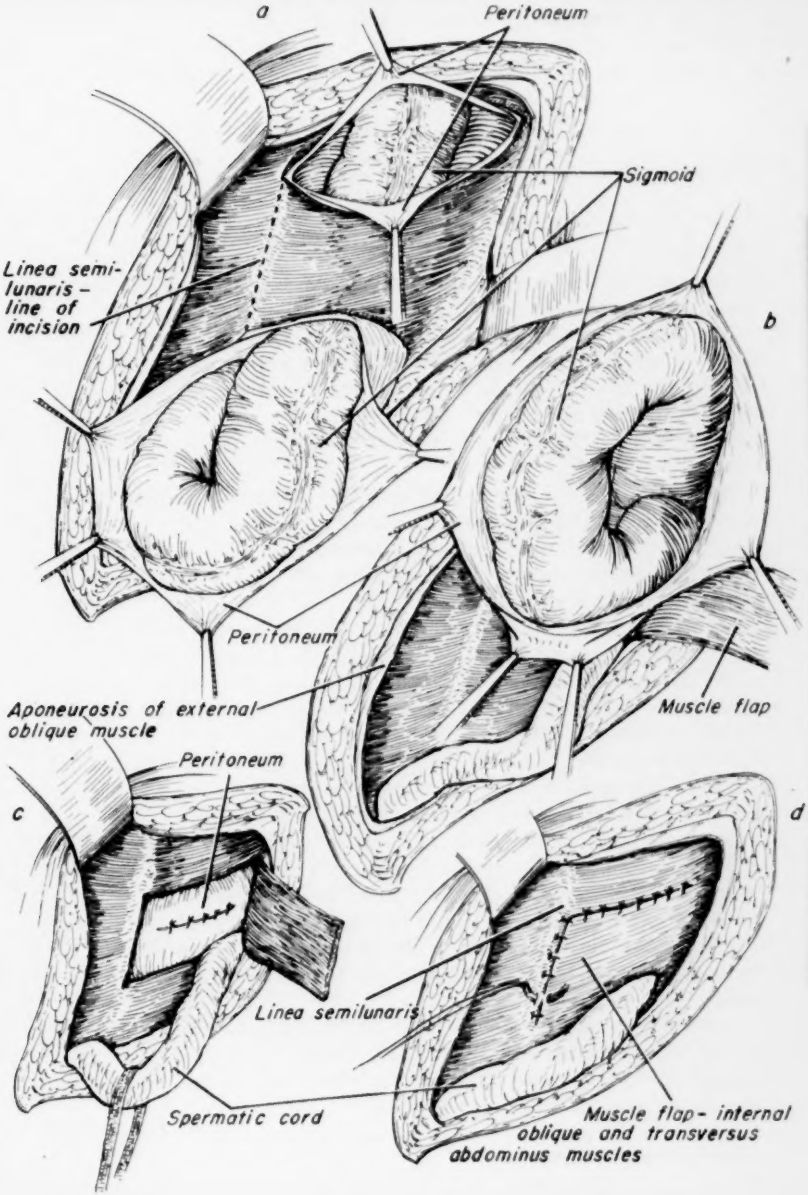
Multiple lipomas of the inguinal canal may also be discovered by this maneuver.

If a very large sliding hernia is found, a muscle flap is formed by dividing the fascial structures from the muscle-splitting incision to the internal ring along the linea semilunaris and reflecting the flap laterally (Figs. *a* and *b*).

By exerting traction on the bowel from above through the muscle-splitting incision and by pushing through the inguinal route from below, the involved bowel is brought well up

The operation for difficult sliding hernia of the large bowel. Am. Surgeon 18:78-84, 1952.

Abdominal Approach in Reduction of Hernia



into the abdominal cavity. After such reduction, the colon may be dealt with by any of the usual methods. The peritoneum of LaRoque's incision is then repaired (Fig. *c*).

The flap of muscle is then sutured into position in the linea semilunaris (Fig. *d*).

A standard plastic repair of the hernial defect is done.

Tumors of Bony Pelvis Causing Sciatica

ELMER C. PAULSON, M.D.

NEOPLASMS in the sacrum and ilia should be searched for assiduously when a patient has sciatic pain.

The lesions are difficult to recognize on roentgenograms because of overlying intestinal gas shadows but can be identified by careful scrutiny of the individual sacral foramina and ridges. Interference by intestinal gas can be obviated by means of repeated examinations, between which the gas usually shifts, or by the use of stereoscopic views.

Ruptured lower lumbar intervertebral disks are responsible for most of the cases of sciatica, particularly unilateral, and the manifestations of the disk lesion are so well known that other possible causes of such pain, including pelvic neoplasms, are usually not considered.

In 10 cases presented by Elmer C. Paulson, M.D., of the Worthington Clinic and Hospital, Worthington, Minn., sciatica resulted from malignant tumors in the sacrum and ilia; 5 of the patients had carcinomatous metastases, with primary lesions in the breast, prostate, or lung. The other patients had giant cell tumor, chordoma, Ewing's tumor or myeloma, lymphoblastoma, or sarcoma.

When a patient is elderly or has had a cancer, such as breast carcinoma, the possibility of metastatic neoplasm should be given primary consideration in investigation of sciatic pain.

The character of the pain may contribute a clue to the etiology usually being persistent and severe in cases of bony metastases. Even morphine may not give complete relief in such cases.

With sciatic neuritis, lumbar myelograms have become almost standard procedures to confirm the presence of a ruptured disk and to obtain accurate information on the size and location of the disk lesion.

Preliminary anteroposterior and lateral films of the lumbosacral spine are ordinarily made. These preliminary roentgenograms should be studied painstakingly for other lesions and not viewed simply in relation to the myelogram.

Neoplasms of the bony pelvis producing the sciatica syndrome. Minnesota Med. 34:1069-1074, 1091, 1951.

Maternal mortality in childbirth is now so low that the obstetrician's chief concern is the infant.

The Physician's Obligation to the Fetus

JOHN W. SIMPSON, M.D., AND LEO J. GEPPERT, M.D.
Baylor University, Houston, Tex.

MORE children die in the first month of life than during all other periods, and the day of birth is the most dangerous threat ever faced. By comparison, war is safe.

Since about two-thirds of deaths occur in the small proportion, 7%, of babies delivered before term, the total loss must be reduced chiefly by avoiding prematurity, conclude John W. Simpson, M.D., and Leo J. Geppert, M.D.

In the United States, the maternal death rate is less than 1 in 1,000 and for many states as low as 0.4 per 1,000. But 1 in 20 mothers endures pregnancy without the reward of a living child.

About 150,000 babies die each year, 50% before birth and 50% soon afterward. Prenatal and natal causes are responsible in 90% of instances. Pediatricians have requested and received charge of the newborn but can function only as salvage officers if the vital factors are predetermined.

The hope of survival is geometrically proportional to weight, and more than 100 gm. weekly is gained during the last two months of gestation. If the physician can prolong pregnancy until after the twenty-eighth week, the baby's chances improve by 25 to 50%. A single week can mean life or death.

Infants under 1,500 gm. are 1.4% of the total number born but account for 36.9% of fetal and neonatal deaths. Fully 78% of this weight class die, more than half within the first twenty-four hours.

Babies between 1,500 and 2,500 gm. represent 6.8% of deliveries but 29% of fatal results. However, only 15% of this weight group succumb, and the proportion can probably be reduced further.

Most stillbirths are directly related to maternal complications. Almost half are due to anoxia from placenta previa, early separation of the placenta, or cord complications. About one-tenth result from trauma, usually with intracranial hemorrhage.

Congenital anomaly or erythroblastosis is responsible for 17.5% of cases, maternal infection or toxemia for a small proportion, and no obvious cause but prematurity in 16.8%.

Of the deaths after birth, roughly one-fifth are caused by congenital anomalies and almost as many by trauma with intracranial bleeding. Hyaline atelectasis is responsible for 14.5%.

In contrast to stillbirths, only 10.5% of neonatal fatalities result directly from anoxia. Approximately the same number are due to erythroblastosis or maternal diabetes, 5.9%

The responsibility of the obstetrician to the fetus. Am. J. Obst. & Gynec. 62:1062-1070, 1951.

to infection, and 19.1% to prematurity or unknown factors.

Cesarean section should rarely be done for the sake of the child. In the group with weight above 2,000 gm. delivered by section, mortality is 8 times the rate for those born by the vaginal route.

Toxemia of pregnancy interferes with infant survival only to the extent that the number of premature deliveries is increased.

Hyaline atelectasis is becoming more frequent, and 90% of cases are associated with prematurity. Involvement is especially common after cesarean section and among offspring of diabetic mothers.

Medical teaching institutions have lowered neonatal and fetal mortality from 5% to about 3%, showing that rates for the country as a whole could be improved by higher standards. Obstetric departments have the best records when policies are enforced by a competent staff that does not change from year to year.

Although the causes of congenital anomalies were once considered immutable, a passive attitude is no longer justified. The effects of maternal rubella and dietary deficiency are now recognized. The private practitioner who is familiar with the mother's prenatal course may discover other preventable influences.

Many inherited defects are corrected by modern surgery.

Ameliorative Drug Therapy for Depression

WILLIAM DRAYTON, JR., M.D.

THE depressed mental states precipitated by physical conditions such as head injury, severe allergy, and the menopause, as well as those attributable to crises in the life situation, often respond to superficial psychotherapy.

In addition to reassurance, suggestion, and discussion of conflicts, William Drayton, Jr., M.D., of Philadelphia finds medication helpful. Dexamyl tablets containing ½ gr. of amobarbital and 5 mg. of dextro-amphetamine sulfate exert mood effect that changes a sense of depression to one of cheerfulness.

The usual dose is 1 tablet three times daily, taken immediately before meals. If the patient also has insomnia, an additional tablet, usually supplemented with 1 gr. of amobarbital, is given at bedtime.

In slight depressions, this medication alone is often sufficient to tide the patient over a bad period and permit him to rally recuperative forces so that the symptoms of depression may be relieved. This regimen is adaptable to treatment of alcoholics and of persons with depressive neuroses of undetermined etiology and, to a more limited extent, those with psychotic depressions.

Recognition and management of the depressed state. Pennsylvania M. J. 54:949-953, 1951.

A simple apparatus can be assembled to provide a cool, humid, controlled atmosphere for children with croup.

Cold Vapor Therapy for Croup Patients

PETER L. MATHIEU, JR., M.D.
Children's Medical Center, Boston

EDWARD WEST, M.D., STEPHEN LEHMAN, M.D., AND BETTY MATHIEU, M.D.
Charles V. Chapin Hospital, Providence

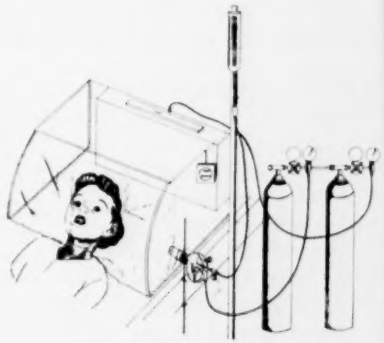
COOL moist air of high oxygen concentration is the first requirement in treatment of patients with acute laryngotracheitis. Specific medication is the second need.

A simple, inexpensive, and easily assembled apparatus for the production of cold vapor is described by Peter L. Mathieu, Jr., M.D., Edward West, M.D., Stephen Lehman, M.D., and Betty Mathieu, M.D. Results have been excellent for all of 10 acutely ill patients for whom the device has been used.

A wetting agent, 0.1% solution of sodium lauryl sulfate (Duponol), is vaporized into a Burgess box which serves as a croup tent (see illustration). Nebulizing of the solution is done under constant pressure of 5 lb. from an oxygen cylinder and a nebulizer.

To vaporize 3 to 5 minims of solution and quickly produce a humidity of 70% and a temperature of 65° F., 4 liters of oxygen per minute are used. The croup tent has a 40% oxygen concentration. Particle size of the cold vapor varies from 2 to 5 μ.

The oxygen rate is then reduced to 2 liters per minute to maintain a humidity of between 60 and 70% and a temperature of 60 to 65° F.



Apparatus for vapor therapy

The vapor therapy has many advantages. The apparatus may be used in the home when hospital facilities are lacking. High humidity is provided in a short time without saturating the patient.

Visibility for nurse and patient is excellent and special steam rooms and waterproof bedding are not necessary. Medical personnel are not exposed to water-drenched walls and scalding steam is not a hazard.

A cold vapor apparatus for the treatment of acute laryngotracheitis. Ann. Otol., Rhin. & Laryng. 60:668-675, 1951.

Sodium lauryl sulfate gives water a higher degree of wetting against a contiguous phase than is obtainable with pure water. The material is completely nontoxic and nonallergic, and keeps the tracheobronchial epithelium moist and free.

Specific medication for acute laryngotracheitis consists initially of combined streptomycin and penicillin therapy. In severe involvement, when a virus is likely, aureomycin may be given. Streptomycin is omitted after forty-eight hours, and penicillin is discontinued when the patient is sufficiently improved.

Typical Course of Herpangina

ROBERT H. PARROTT, M.D., AND ASSOCIATES

DURING summer, herpangina is a common childhood disease. The condition is extremely contagious and usually runs a benign, self-limited course. Chief manifestations are fever, sore throat, and vesicular or ulcerated lesions on the anterior tonsillar pillars or soft palate.

Sudden in onset, the disease usually begins with fever, which lasts from one to four days. Anorexia and dysphagia are noted in over half the cases, while sore throat occurs in 36% and vomiting in 27%. Less than a quarter of the patients have abdominal pain.

The typical throat lesions are always present and consist of grayish-white papulovesicles about 1 to 2 mm. in diameter with a surrounding areola of erythema. The number of vesicles is usually 5 but 2 to 14 may be found. The vesicles enlarge, rupture, and then appear ulcerated and of a grayish-yellow color. The lesions are commonly found on the anterior pillar of the tonsillar fauces and may be seen for four to six days after start of the illness. The pharynx is ordinarily diffusely injected.

At the Children's Hospital in Washington, D.C., during a 1950 outbreak of herpangina, 22 children, aged 6 months to 8 years, were observed with the disease. Over one-third were siblings. The severity of the symptoms was unrelated to the patient's age.

A virus was recovered by Robert H. Parrott, M.D., Sidney Ross, M.D., Frederic G. Burke, M.D., and E. Clarence Rice, M.D., of Georgetown University, Washington, D.C., in 19 of the 22 patients, most commonly from frozen fecal specimens. Neutralizing antibodies against homologous strains of virus were found in all convalescent serums, and a rise in titer was demonstrated during the illness in 70% of cases. Viruses were similar to those classified among Group A Cocksackie viruses.

Herpangina: clinical studies of a specific infectious disease. New England J. Med. 245:275-280, 1951.

When a child has taken an overdose of antihistamines, emergency therapy must be rapidly started to prevent death.

Acute Antihistamine Toxicity in Children

HAROLD I. LECKS, M.D.
Children's Hospital, Philadelphia

SEVERE or fatal poisoning may result from Benadryl or other common antihistamine drugs in doses as small as 100 mg.

About half of the cases so far reported involve little children, who may accidentally obtain and swallow large amounts. The central nervous system is diffusely stimulated or depressed, and manifestations include convulsions, cyanosis, and cardiorespiratory collapse.

No specific antidote has been found. Harold I. Lecks, M.D., advises evacuation of the stomach and application of symptomatic remedies.

The pattern of severe antihistamine reactions resembles that of atropine. The cerebrum and cerebellum may be affected, and excitement, hallucinations, ataxia, or incoordination may be observed. Fixed dilated pupils, flushed face, and fever are fairly common.

Gastrointestinal complaints are, unfortunately, unusual so that the patient is unlikely to vomit immediately after ingesting the drug. Convulsions may be preceded by muscular tremors and athetoid movements. Seizures are the intermittent tonic-clonic type and exceedingly refractory.

Coma may develop and deepen; death usually occurs in two to eighteen hours. If the critical stage is survived, renal and hepatic failure may be superimposed.

At autopsy, evidence of an acute stress reaction is noted. Anoxic changes in the brain, liver, lungs, and kidneys closely resemble the effects of heat stroke.

Toxicity is apparently unrelated to the known pharmacologic properties of antihistamine agents.

As a safeguard against overtreatment, antihistamines should be given according to individual needs rather than fixed rules. When minor side effects develop, therapy should be stopped. The largest single dose should not exceed 2 mg. per pound of body weight. Prescriptions should be limited so that no surplus is available later.

Parents ought to be warned to keep the medication out of the reach of children and the nature of toxic symptoms should be explained. The elixirs and syrups as well as the bright-colored capsules and tablets are especially attractive to children.

After a toxic dose, the stomach is preferably emptied by a mechanical technic, although an emetic may be tried. If the central nervous system is involved, particular care must be taken to keep the child from aspirating the stomach contents.

Acute antihistamine intoxication in childhood. Quart. Rev. Pediat. 6:294-299, 1951.

With cortical irritation, ether is given by mask or rectal injection. A 50% solution in oil may be instilled in doses of 0.5 to 1 cc. per kilogram.

Paraldehyde may be administered, using 4 to 5 cc. as the initial rectal dose. If effects are inadequate, short-acting barbiturates are employed in repeated small doses. Narcotics and the barbiturates with prolonged effect should be avoided.

For stupor or coma, 5 to 10 mg. of amphetamine sulfate is administered intramuscularly or intravenously. Doses are repeated at brief intervals, depending on age and response, but with extreme caution to prevent convulsing overdosage.

If amphetamine is not available, stimulants such as ephedrine sulfate in amounts of 5 to 10 mg. per kilogram may be substituted, or 10 mg. of caffeine per kilogram. Oxygen, antibiotics, blood, plasma, and electrolyte solutions are utilized when necessary.

Pregnenolone for Seminal Deficiency

ABRAHAM R. ABARBANEL, M.D.

THE fertilizing power of human sperm is often increased by one or more short courses of pregnenolone.

In some cases, methyl testosterone with thyroxin is preferred. Effects of testosterone propionate, ethinyl testosterone, progesterone, and desoxycorticosterone acetate are disappointing.

As employed by Abraham R. Abarbanel, M.D., of the College of Medical Evangelists, Los Angeles, pregnenolone acetate raised the sperm count 50% or more in 19 of 40 men and improved motility of sperm in 35% of cases. After infertile periods averaging more than three years, 22 conceptions occurred in 18 wives, and 14 healthy babies were born.

Pregnenolone acetate is injected intramuscularly in sesame oil in concentrations of 20 to 50 mg. per cubic centimeter. A dose of 50 mg. is given weekly for four weeks, then 50 mg. twice a week or 100 mg. weekly for four to eight weeks, followed by a four-week rest. If no improvement is evident, a second course is administered with dosage doubled.

When basal metabolism is low, 0.5 mg. of thyroxin is provided daily and pregnenolone is not given until the metabolic rate is minus 5 or above. Methyl testosterone is given chiefly when large immature spermatozoa predominate. From 5 to 10 mg. per day is given orally or in buccal form with thyroxin, in courses of four to eight weeks with rest intervals of four weeks.

The adjuvant use of various steroids in relative seminal inadequacy in the human with particular reference to pregnenolone. *Symposium on Steroids in Experimental and Clinical Practice*, Abraham White, M.D., ed., Blakiston Co., 1951, pp. 350-365.

Control of hemorrhage after suprapubic enucleation of the prostate gland is facilitated by use of oxycel and a bag catheter.

Oxycel and Bag Catheter in Prostatectomy

WILLIAM J. BAKER, M.D., AND EDWIN C. GRAF, M.D.
St. Luke's Hospital, Chicago

BLEEDING after suprapubic prostatectomy is better controlled by a bag catheter wrapped in oxidized cellulose than with the customary gauze packs.

The ordeal of removing nonabsorbable material through the wound, a risk with a second anesthetic and almost unbearable without, is altogether avoided. Urinary infection is less frequent than with former methods, and incisions heal more rapidly, report William J. Baker, M.D., and Edwin C. Graf, M.D.

The bag catheter is draped with a single layer of oxycel and only partly distended with sterile water. After the bag is drawn into the prostatic fossa, more water is added until the fit is snug.

The bladder is closed in the usual manner around a 20F de Pezzer catheter placed high in the cystostomy wound. Tension may be exerted on the distended bag if desired but ordinarily is not necessary.

Patency of the catheters is tested with physiologic saline solution. If not obstructed, the tubes are not irrigated, regardless of the amount of bleeding.

When hemorrhage is not excessive, the bag is deflated six hours after surgery, and the urethral catheter is removed twenty-four hours postoperatively.

The suprapubic catheter is left in place until the tenth postoperative day. The suprapubic sinus is generally allowed to close spontaneously, but if healing is slow, the sinus is kept dry by an indwelling urethral catheter for two to three days.

Use of a single layer of oxycel instead of many layers around the bag reduces the amount of residual debris. Less of the jelled substance is aspirated, and dangers of foreign body complications are decreased.

Gentle partial filling of the bag lowers pressure on the prostatic bed, and all pressure is removed from the fossa in six hours; thus bladder spasms excited by complete distention are averted. Early decompression also eliminates pressure on the sphincters and actually promotes hemostasis.

The first 50 operations with the oxycel technic were compared with the last 50 enucleations by the older packing method.

Total visible blood loss was less with the bag, and an average of fifteen and a half days was required to obtain a dry suprapubic sinus with natural voiding. Severe persistent infection of the urine, once a serious problem, was not seen. De-

Evaluation of oxycel–bag catheter technique in suprapubic prostatectomy. J. Urol. 67:101-105, 1952.

crease of infection was also shown by the minimal febrile reaction when intravesical tension was reestablished.

Oxycel produced few complications. In 2 instances, stress incontinence persisted for a few weeks, and in a third, a nidus of oxycel impregnated with calcium salts was removed by cystoscope. The only death was due to a massive embolus in a fat man who had high blood pressure and rapid pulse before operation.

With gauze packs, eighteen days elapsed before the sinus was dry, urosepsis developed in 7 cases, and surgical shock caused 1 of 2 deaths; the other resulted from bacterial endocarditis.

Differentiation Between Renal Tumors and Cysts

WILLIAM L. AINSWORTH, M.D., AND SAMUEL A. VEST, M.D.

SURGICAL exploration is not desirable in most instances of large solitary cysts of the kidney if diagnosis can be confirmed, according to Samuel A. Vest, M.D., and the late William L. Ainsworth, M.D., of the University of Virginia Hospital, Charlottesville.

Roentgenographic appearance is the most important aid to diagnosis. Large cysts usually produce a circular shadow with even contour and do not change the kidney outline. Location is usually at one of the poles, with the cyst tending to grow away from rather than into the kidney substance. Solid tumor casts a dense and usually irregular shadow. By palpation the cyst is more likely than a tumor to be movable, round, and resilient.

When history, roentgenograms, and general findings suggest cyst, diagnosis may be confirmed by renal cystograms. These are done by aspiration through the back and injection of excretory contrast medium, a painless office procedure.

A scout film is made to show the relation of the mass to the lumbar vertebra. With the patient seated, novocain is injected toward the center of the mass and along the sacrospinalis muscles. An 18-gauge lumbar puncture needle is inserted. The cyst wall offers unmistakable resistance. When the needle has entered the cyst, the end will go up and down on respiration. From 30 to 50 cc. of fluid is aspirated and a similar amount of excretory contrast medium injected.

On the urogram, a line of demarcation between the mass and the normal cortex may often be seen. Infiltration of a tumor may lessen the demarcation. The greater density of a tumor may also obliterate the outline of the psoas muscle. However, the weight of a large cyst may produce roentgenographic changes, too, the most prominent being ptosis, rotation, and deviation of the kidney.

The differential diagnosis between renal tumors and cysts. J. Urol. 66:740-749, 1951.

With anal disease symptomatic measures should be avoided and the underlying condition recognized and treated.

Anal Infections in General Practice

MALCOLM R. HILL, M.D.
College of Medical Evangelists, Los Angeles

MANY chronic and disabling complications of the anorectal canal can be prevented by early therapy. A thorough study of the region to the 10-in. level may reveal infectious lesions in the incipient state and preclude a debilitating chain of events.

The technical requisites of early diagnosis are not beyond the scope of general practice, states Malcolm R. Hill, M.D. Symptomatic treatment should be avoided since 9 of 10 cases of anorectal disease can be diagnosed by inspection, palpation, and anoscopic examination.

Anorectal infection is the consequence of confinement of infected material in a closed space without dependent drainage—the anal crypts (see illustration). Subsequently inflammation spreads to involve the associated ducts and glands. Because of the complexity of etiologic patterns, anorectal inflammation cannot be considered a single disease.

The symptoms of anorectal infectious disease are alteration in bowel habits, bleeding, pain, swelling, purulent discharge, and loss of weight.

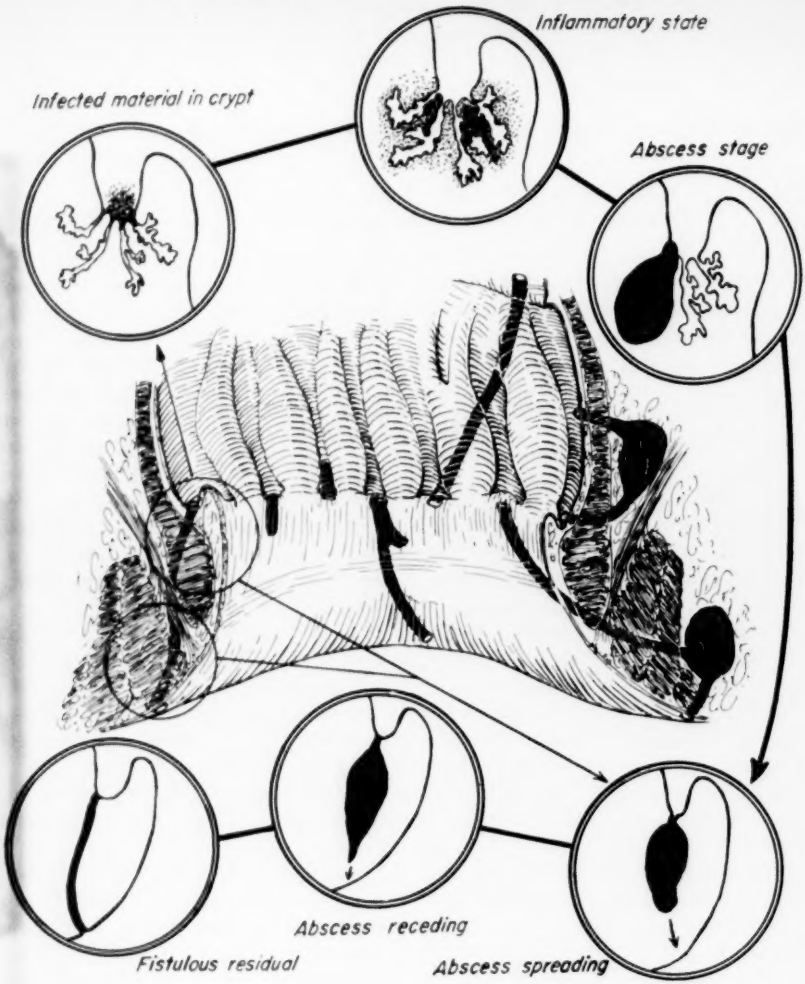
- Alteration in bowel habit of organic origin may be caused by infection or new growth. Change in size, shape, consistency, and color of the stool must be noted.
- Bleeding may be from a lesion anywhere in the gastrointestinal tract, but fresh blood usually comes from the sigmoid, rectum, or anus. Bright red blood which drips or spatters in the toilet basin or is observed on the toilet tissue is commonly from an anorectal infectious lesion or from hemorrhoids.
- Pain incident to anorectal inflammation is usually localized, dull, aching or throbbing, with bearing-down sensation.
- Swelling which increases, associated with pain, malaise, and fever, indicates abscess formation.
- Discharge of a purulent character from the anus most often results from a fistula-in-ano.
- Loss of weight may be the principal sign of infection or neoplastic disease.

Proctosigmoidoscopic examination is done with the patient in Sims's position after inspection, palpation, and observation of the anal region. The lower bowel is cleansed two hours before. Preliminary application of a topical water-soluble anesthetic facilitates the examination.

Adequate relaxation by the use of low spinal or caudal anesthesia is necessary for therapeutic procedures.

For fissures, ulcerated areas should be removed including subcutaneous

Anal infections encountered in general practice. California Med. 75:89-93, 1951.



Spread of infection from crypt line and pathogenesis of infection

gland-bearing tissues with crypts, ducts, hypertrophic anal papillae, and sentinel pile.

Abscesses should be incised and drained early.

Fistulous tracts are removed surgically. The crypt, duct, and gland elements related to the primary opening of the fistula are also resected.

Wide surgical dependent drainage is paramount in curing anorectal inflammatory disease.

Since any anesthetic agent is potentially toxic, the physician must be able to recognize and cope with untoward reactions.

Toxic Reactions to Local Anesthetics

MAX S. SADOVE, M.D., GORDON M. WYANT, M.D.,
LLOYD A. GITTELSON, M.D., AND HENRY E. KRETCHMER, M.D.
University of Illinois, Chicago, and
Veterans Administration Hospital, Hines, Ill.

NOT sensitivity but overdosage is responsible for most untoward effects of local anesthesia. Too rapid injection, quick absorption from a highly vascular site, or inadvertent entry of a vessel may also be responsible for adverse reactions.

Any agent is potentially toxic. Various parts of the body are first stimulated, then depressed in different degrees at the same time or in succession. Max S. Sadove, M.D., Gordon M. Wyant, M.D., Lloyd A. Gittelson, M.D., and Henry E. Kretchmer, M.D., list three classes of reaction:

1] In normal persons the central nervous system is affected, particularly the cerebral cortex or medulla, including respiratory and vasomotor centers. The drug may also act directly on the heart or vascular bed.

2] A few individuals have abnormal responses loosely described as allergy, hypersensitivity, or idiosyncrasy.

3] Certain vasodepressor or psychomotor effects are purely psychologic, such as fainting at sight of the needle.

Since drug tolerance varies, the previous experience should be known and, if hypersensitivity is suspected, general anesthesia or a different local compound should be used. Metabolic factors must be considered; thus dosage is reduced with old age, debility, or shock.

Mucous membranes of the mouth, nose, throat, lower respiratory, and digestive tracts absorb fluids rapidly; excess solution should never be swallowed or inhaled. Accidental injection of vessels is prevented by several aspiration tests during each procedure, particularly near the spinal column. Pleural or visceral puncture must be avoided.

Stimulation of the central nervous system may cause anxiety, loquacity, nervousness, tremors, or clonic convulsions. As a precautionary measure, short-acting barbiturates should be injected intramuscularly about two hours before anesthesia.

If anesthesia is exciting, a small dose of barbiturate is repeated, and oxygen is administered to prevent related medullary depression. For outright convulsions, ultrarapid sedatives are injected by vein at once but slowly, with close observation of pulse and blood pressure.

Central nervous depression is always preceded or accompanied by some stimulation, however brief and slight. Speech fails, then consciousness, muscles relax, and breath may

Classification and management of reactions to local anesthetic agents. J.A.M.A. 148:17-22, 1952.

cease. Artificial or assisted breathing is started and oxygen given, but respiratory stimulants are dangerous.

Central vasomotor depression may cause fainting, pallor, cyanosis, palpitation, or precordial discomfort, but death rarely ensues except after large anesthetic applications to throat and larynx.

Vasopressors are suitable for therapy of central vasomotor depression; for example, methoxamine hydrochloride is given in intravenous doses of 10 mg. The table is slowly tilted so that the patient's head is down, but not more than 10 degrees. Fluids are given and a carbon dioxide-oxygen mixture may be needed.

Peripheral cardiovascular effects include arrest of the heart by a massive intravenous dose. Artificial respiration and cardiac massage are used. Vascular collapse of peripheral origin is managed like the central type.

Of the *abnormal responses*, allergic forms are primarily skin eruptions such as hives or angioneurotic edema. Contact dermatitis results from anesthetic ointments; sometimes hands of dentists who handle anesthetic solutions are affected.

Hypersensitivity and idiosyncrasy produce common or bizarre effects after very small doses. Treatment depends on symptoms.

Incidental psychomotor reactions to the anesthetic procedure aside from the drug may be prevented by preliminary reassurance and sedation.

Epinephrine added to local anesthetics retards absorption but may cause reactions ranging from nervousness to ventricular fibrillation and death. Amounts should be small and solutions dilute, such as 1:200,000, or 5 minims of 1:1,000 solution to 100 cc. of procaine.

Intense vasoconstriction is not advisable for anesthesia of fingers and toes or for patients with coronary disease, hyperthyroidism, or vasolability.

Iritis as a Symptom of Ankylosing Spondylitis

M. Q. BIRKBECK, M.B., W. ST. J. BUCKLER, M.B.,
R. M. MASON, B.M., AND W. S. TEGNER, B.M.

THE chief initial symptom of ankylosing spondylitis may be an acute attack of nonspecific iritis. All too frequently the iritis is treated while the associated spondylitis is ignored.

In the past year, M. Q. Birkbeck, M.B., W. St. J. Buckler, M.B., R. M. Mason, B.M., and W. S. Tegner, B.M., of London Hospital, England, have studied 11 patients whose main symptom was iritis and who were later proved to have ankylosing spondylitis.

Since radiotherapy, cortisone, and the adrenocorticotropic hormone have powerful therapeutic effects in ankylosing spondylitis, early diagnosis and treatment are important.

Iritis as the presenting symptom of ankylosing spondylitis. Lancet 261:802-805, 1951.

Medical Forum

Discussion of articles published in MODERN MEDICINE *is always welcome. Address all communications to The Editors of* MODERN MEDICINE, *84 South 10th St., Minneapolis 3, Minn.*

Laboratory Evaluation of Kidney Function*

Comment invited from
Richard W. Lippman, M.D.
David P. Earle, Jr., M.D.

► TO THE EDITORS: I agree with Dr. James P. Simonds that most clearance studies in the evaluation of kidney function are too complicated and subject to misinterpretation for general clinical use.

In my opinion, the most valuable tests are [1] an Addis count and quantitative urinary protein excretion carefully performed on a fresh or formalin-preserved specimen, [2] specific gravity of a concentrated specimen, [3] serum creatinine and fasting urea nitrogen concentrations, and [4] the endogenous creatinine clearance (*J. Clin. Investigation* 30:206, 1951). Of course, when surgical lesions are under consideration, judicious and conservative use of urography and cystoscopy is indicated.

In most instances, these tests are adequate for clinical management and evaluation of renal diseases. The phenolsulfonphthalein test is only semiquantitative and, by the time the results are unequivocal, a glance at the patient and a whiff of the breath will suffice for the knowledge of renal insufficiency. The urea clearance is more subject to error and of less significance than the endogenous creatinine clearance, which is more easily performed.

RICHARD W. LIPPMAN, M.D.
Los Angeles

► TO THE EDITORS: The clearance of inulin is a precise measure of glomerular filtration rate while the clearance of para-aminohippuric acid (PAH) at low plasma PAH concentrations is a measure of renal plasma flow. Maximum tubular excretory function may be measured at high plasma PAH levels and maximum tubular reabsorptive capacity at high plasma glucose levels. These two measurements yield an estimate of the function of the proximal convoluted tubules.

None of the practical routine clinical tests of renal function are precise measures of the above specific functions. Nevertheless, the routine tests are of great value and their interpretation is considerably enhanced if their relation to the specific functions is understood.

Endogenous creatinine is chiefly excreted by glomerular filtration but a small amount is also excreted by the renal tubules. Its clearance, therefore, is approximately 20% greater than filtration rate.

*MODERN MEDICINE, Dec. 15, 1951, p. 73.

Urea is also excreted by glomerular filtration. Some of the filtered urea, however, is reabsorbed by the renal tubules. Its clearance, therefore, is less than that of glomerular filtration. Further, the absorption of urea by the tubules appears to be a passive process and so is affected by the rate of urine flow.

Nevertheless, the urea clearance is also a crude measure of filtration rate. The blood level of urea, and of nonprotein nitrogen and creatinine, is dependent not only on the filtration rate but also on the intake, or rate of endogenous production, of nitrogen. The blood urea level is generally not obviously elevated until the filtration rate is greatly reduced and even then is greatly modified by the intake of nitrogen. In addition, when a low urine output is maintained for any considerable period of time, the blood urea level may rise because of the decreased urea clearance, even if no change has occurred in glomerular filtration rate.

Phenolsulfonphthalein (PSP) is excreted rapidly by the renal tubules; at the low plasma PSP levels achieved during the standard test, the PSP excretion rate is dependent upon the renal plasma flow. However, when the ability of the renal tubules to excrete PSP is greatly impaired, the excretion rate of PSP no longer reflects the renal plasma flow but becomes a crude measure of the PSP excretory mass and, thus, of the function of the proximal convoluted tubules. It is difficult to say at what stage of renal functional impairment this shift in the interpretation of PSP excretion takes place. However, the dividing line probably occurs when PSP excretion is reduced to 20 to 30% of normal.

The distal convoluted tubules play an important role in the concentrating and diluting ability of the kidneys. The final adjustment in the urine *p*H and the formation of ammonia are also probably functions of the distal convoluted tubules.

Thus, creatinine and urea clearances, blood level of urea, PSP excretion, concentrating and diluting ability, and the capacity to alter urinary *p*H and form ammonia are all dependent upon different renal functions. It is important, therefore, to select judiciously the tests of renal function to be utilized in any given case. It is equally important to realize that some tests may give normal results while others give abnormal. Abnormal results in disease may arise from structural alterations or from hemodynamic or other functional changes.

Since the routine clinical tests do not usually measure specific renal functions, and since they are subject to considerable error unless the urine is carefully collected through a catheter, too much reliance cannot be placed on them for diagnostic purposes, except to gain a rough estimate of over-all renal function. Nevertheless, if carefully done, the routine clinical tests may assist in the differential diagnosis of renal disease.

For instance, hypertensive disease is associated with a decreased renal plasma flow, while a relatively greater decrease in filtration rate than in other functions is characteristic of diffuse glomerulonephritis. A moderately reduced PSP test and a normal or only slightly reduced creatinine

or urea clearance would be characteristic of the former condition, with the reverse combination more common in the latter. With advanced renal damage, no matter what the etiology, all renal functions become impaired and the tests lose all possibility of helping in the differential diagnosis.

DAVID P. EARLE, JR., M.D.
New York City

Reversibility in Ulcerative Colitis*

Comment invited from
Thomas E. Machella, M.D.
Albert F. R. Andresen, M.D.
Anthony Bassler, M.D.
William Wolarsky, M.D.
J. A. Bargen, M.D.
Homer C. Marshall, M.D.

► TO THE EDITORS: The claim of Drs. Joseph B. Kirsner, Walter L. Palmer, and Arthur P. Klotz that some cases of chronic ulcerative colitis are reversible is borne out by experiences in our clinic.

We have at least 6 patients who have been in clinical, proctosigmoidoscopic, and roentgenologic remission for intervals varying from four to twenty-three years. The reversibility in the roentgen appearance of the colon includes a disappearance of evidence of extensive pseudopolyposis, a finding which some consider an indication for colectomy.

The complete and lasting recovery some severely ill patients make should cause us to wonder just how many ulcerative colitis patients have been committed to an "ileostomy" life or exposed to the inconvenience, expense, and risks of ileostomy and colectomy unnecessarily.

The most important single factor in the induction and maintenance of prolonged remissions in our cases has been the discovery and successful handling of the emotional factors motivating the disease.

THOMAS E. MACHELLA, M.D.
Philadelphia

► TO THE EDITORS: For over twenty-five years I have been writing, discussing at medical meetings, and demonstrating to medical students, interns, and postgraduate students the fact that uncomplicated so-called nonspecific ulcerative colitis is reversible. I have demonstrated the changes in the radiographic picture of the disease, the restoration to normal of the fuzzy thickened mucosal outline, the gradual disappearance of hypertonicity and irritability, and even over the years, the very gradual subsidence of evidences of such complications as deformities, strictures, and polypoid changes upon the removal of the cause of the ulcerative colitis. This may entail withdrawal from the diet of a food to which the colon is sensitized or, in some cases, removal of focal infections.

Immediate improvement can be observed directly through the proctoscope. The changes consist of subsidence of edema, epithelization of the denuded areas of mucosa, cessation of bleeding, gradual fading of the intense redness, and relaxation of what appeared to be developing strictures. A surprising return to normal appearance finally results, such as is seen in the skin following urticaria,

*MODERN MEDICINE, Jan. 1, 1952, p. 71.

herpes, or eczema after elimination of allergens causing these conditions. Recurrences, which have erroneously been called remissions or exacerbations and upon which the assumption of chronicity and incurability has been based, can, by careful study, always be traced to either [1] ingestion of an allergen previously shown to be at fault, [2] the development of a sensitivity to some new factor, or [3] the occurrence of a new focal infection. Prompt elimination of all such factors results in rapid clearing of the recurrent attack.

The diet study necessary for discovery of the allergen is extremely laborious. It cannot be eliminated in favor of skin tests but often can be carried on during the preliminary complete study of the patient, an important factor in complete diagnosis.

Complications, such as cicatricial contractions, obstructions, perforations, and profuse hemorrhages, may be due to prolonged neglect of the allergic causes but are more frequently due to secondary infections of the vulnerable colonic wall, often with lymph node involvement. In these cases antibiotics are indicated.

Complete care of the patient is very important and in severe cases requires bed rest, intravenous feedings, and transfusions. The most important part of the care, however, consists in the finding and elimination of the allergic cause of the disease. As in other allergic manifestations, the administration of cortisone or ACTH may be of temporary value but, if used at all, should not be continued for more than a few days.

ALBERT F. R. ANDRESEN, M.D.

Brooklyn

► TO THE EDITORS: There is no doubt that reversibility in ulcerative colitis is occasionally observed. There are now dozens of instances where all signs of the disease have disappeared and the patient has remained perfectly well for years.

However, one must guard against being too definite about a cure, because I have seen instances with no evidence of trouble for as long as twelve years and then a short and easy to control recurrence takes place. The reversed instances are more common in well-stabilized individuals in whom the disease is mostly limited to the lower colon and an eroding (mucosal breakdown) pathology has not occurred.

I believe that the results from medical treatments are chiefly dependent on the type and degree of pathology in the mucosa. When but little lymphatic tissue is involved and the cytologic elements of the mucosa have not been irreparably destroyed, except perhaps in very localized areas, cures can be brought about, and this means reversibility.

I want to again make the plea for more serious medical handling of ulcerative colitis, especially in the early stages of disease.

ANTHONY BASSLER, M.D.

New York City

► TO THE EDITORS: The recent literature on ulcerative colitis has tended to stress the importance of the surgical aspects of the disease. The paper of Drs. Kirsner, Palmer, and Klotz is indeed stimulating and refreshing from the medical point of view.

The reversibility of ulcerative coli-

tis has long been known. Workers in this field have repeatedly seen the change from advanced ulcerative disease of the bowel to purportedly normal mucosa. That this may take years, with repeated increasingly milder exacerbations in the interim, has also been frequently reported. With this knowledge at hand, one must select with considerable thought patients for surgical therapy.

One of the criteria for arrest—the term we prefer to use rather than cure—that we have repeatedly stressed is the absence of pus cells from the mucosal crypt aspirate, as described by Felsen. In many cases with a regression of roentgenographic changes and apparently normal sigmoidoscopic findings, we have found pus cells in the aspirate. Such cases, while considered to be clinically arrested, thus still have evidence of residual infection.

This same test is used to determine the advisability of reestablishing continuity of the bowel after ileostomy or ileostomy and subtotal colectomy. Unless repeated examinations of the aspirate through the sigmoidoscope are negative for pus cells, we do not advocate reestablishment of continuity, in spite of complete regression of clinical symptoms and signs.

When clinical, roentgenographic, sigmoidoscopic, and microscopic findings are all normal, we consider that complete reversibility is exhibited. In our experience, the number of such cases will usually vary directly with the severity of the disease. The largest number will be found in the mild cases, next to the largest in moderately severe cases, and the smallest number in the severe cases. The important point to remember is that even severe cases may revert to normal under carefully supervised medical care.

The determination of which case will ultimately reverse itself and which will not remains the great enigma of chronic ulcerative colitis.

WILLIAM WOLARSKY, M.D.
Bronx, N.Y.

► TO THE EDITORS: Complete healing of an ulcerative colitis is not uncommon. In many instances characteristic scars of the mucous membrane of the rectum will be observed through the sigmoidoscope, but in other cases the change is so complete that the mucous membrane appears entirely normal. I presume this would be considered reversibility of the condition.

Return to normal as seen by roentgenologic examination is uncommon but it, too, does occur. We have observed a fairly large series of such cases. During one recent week, I saw 3 patients who had all had severe active ulcerative colitis involving the entire large intestine. In 1 case, the disease had been very destructive and, while the patient was completely well clinically, having 1 daily formed stool, the sigmoidoscope showed the typical scars in the mucous membrane.

A second patient who had had severe disease with involvement of the entire large intestine had no demonstrable changes in the mucous membrane by sigmoidoscope, and the roentgenologist reported the colon as negative. Both patients were first examined here in the spring of 1951 and were treated with Azopyrin.

The third individual is a woman whom I first saw with the disease in 1927. At that time, the condition was advanced. She eventually recovered and for a number of years enjoyed good health. Then she returned with a squamous-cell type of carcinoma of the ascending colon. At that time, the rectum had completely healed but was markedly scarred; however, the bowel had healed so well that the surgeon was able to make an ileosigmoidostomy, performing a subtotal colectomy, and the patient made an uneventful recovery. Now, two years later, she seems to be entirely well.

I cite these cases to illustrate that the healing of ulcerative colitis does take place and without the use of any of the hormones such as ACTH. None of these patients received such hormones.

J. A. BARGEN, M.D.
Rochester, Minn.

► TO THE EDITORS: The reversibility in ulcerative colitis noted by Drs. Kirsner, Palmer, and Klotz is an interesting and valid observation. One wonders, of course, why these 24 patients differ from other patients with an apparently similar disease who do not improve with treatment or who have an incomplete remission of the disease. It is possible that ulcerative colitis is a manifestation of a number of different etiologic factors.

Prior to the use of ACTH, the unpredictability of the course of ulcerative colitis sometimes led one to suspect that treatment in any form merely protected the patient from the ravages of the disease and that the ulcerative colitis followed its own course without regard to treatment. The apparent reversibility of early ulcerative colitis with the use of ACTH needs investigation along a number of lines, including an attempt to determine which patients will respond and what the underlying mechanism of the effect is.

This very interesting paper calls the attention of all those working in fields related to ulcerative colitis to the need for investigation of why bed rest, sedation, nutritional restitution, control of infection, and psychotherapy are only sometimes effective.

HOMER C. MARSHALL, M.D.
Springfield, Mo.

Exposure Therapy of Burns*

Comment invited from
Warren L. Rosen, M.D.
Conrad R. Lam, M.D.

► TO THE EDITORS: The open-air treatment of large burns described by Drs. T. G. Blocker, Jr., Virginia Blocker, S. R. Lewis, and C. S. Snyder is certainly a most practical method of handling large numbers of casualties such as would be expected after an atom bomb explosion. However, with the recent emphasis which has been put upon this method of treatment, I do not believe that we should lose sight of the now accepted method of fine mesh gauze and pressure dressings, either with or without Vaseline, whenever feasible.

The two methods can be compared in a patient of mine who is now

*MODERN MEDICINE, Dec. 15, 1951, p. 79.

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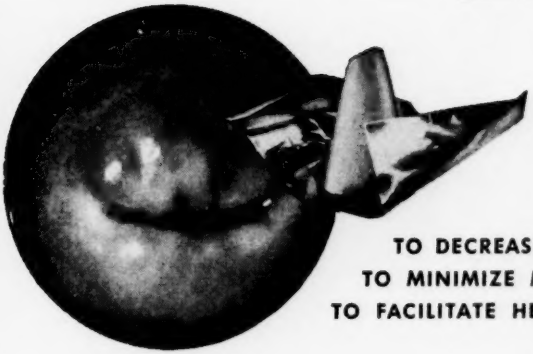

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under treatment. This patient was severely burned by hot starch which covered his fingers, hands, forearms, and abdominal wall. All burned areas were treated by application of fine mesh Vaseline strips, covered with fluffy dressings and Ace bandages, with the exception of the lower portion of the abdominal wall. It was impossible to maintain any dressings there because all would ride up when he assumed a sitting position.

It was decided to treat the lower abdominal wall with the exposure method and to use pressure dressings with Elastoplast on the burned areas of the middle and upper abdomen.

The portions that were covered healed promptly while the lower portion, although clean and with no infection, is still not completely healed after six weeks. I believe that this evidence is rather conclusive as a comparison of the methods under discussion.

WARREN L. ROSEN, M.D.

New Orleans

► TO THE EDITORS: The method of Dr. T. G. Blocker, Jr., and his associates represents the last phase of two complete cycles in the philosophy of the treatment of burns during the last half century.

First we had the exposure method and dusting with zinc stearate (Haldor Sneve, 1905); then came occlusive dressings with Carron oil; next we had the exposure method again—this time with tannic acid, which was happily supplanted by occlusive dressings again with vaselined gauze on the burned surface. Now we have the exposure method proposed again, without the use of any local medication.

The surgeon who treats burns by any one of many methods today has a great advantage, since he has antibiotics for infection, understands the value of blood volume replacement, and uses modern methods of skin grafting promptly instead of permitting scarring.

It may turn out that we will have the exposure method with us for some time. I have always used it on the face in preference to occlusive dressings, and I am not surprised that Dr. Blocker has found it efficacious for other areas. Of course, the method is especially attractive where a large number of burned patients may be received at one time.

CONRAD R. LAM, M.D.

Detroit

Diagnostix

Here are diagnostic challenges presented as they confront the consultant from the first clue to the pathologic report. Diagnosis from the Clue requires unusual acumen and luck, from Part II, perspicacity; from Part III, discernment.

Case MM-211

THE CLUE

ATTENDING M.D: The next patient, a 34-year-old plumber, was brought to the hospital in coma. He had been feeling slightly ill for about one month. His wife, who gave the history, is inclined to relate the present illness to a tooth extraction six weeks ago.

VISITING M.D: Before that he was well?

ATTENDING M.D: Yes. However, a week or so after the extraction he began to lose his appetite and to tire easily. He continued to work but occasionally felt feverish and often had drenching sweats, especially at night. These symptoms continued unchanged until the evening before admission.

VISITING M.D: No localizing symptoms such as cough, vomiting, or diarrhea?

ATTENDING M.D: No. I considered a lung abscess complicated by a metastatic brain abscess and inquired about the dental anesthesia and found that novocain had been used. I have not discovered any evidence of exposure to tuberculosis or brucellosis.

VISITING M.D: Let's hear about the onset of coma.

PART II

ATTENDING M.D: The acute phase of the illness was very brief. After dinner the patient complained of a right occipital headache which quickly became severe and spread into the neck. The left arm got weak and soon thereafter he became unconscious and was brought to the hospital.

VISITING M.D: Sounds like a cerebrovascular accident. At the patient's age a subarachnoid hemorrhage is possible, but that doesn't explain the symptoms of fatigue, anorexia, and sweats. What about the physical examination?

ATTENDING M.D: The patient was comatose and pale. His temperature was 100° rectally, blood pressure 125/78, pulse rate 68, respirations 20. The pupils were equal and reacted to light. The deep tendon reflexes were hypoactive, especially on the left side. Babinski's sign was found on the left.

VISITING M.D: Possibly a lesion of the right cerebrum. Any other positive findings?

ATTENDING M.D: The neck was stiff and Kernig's sign was demonstrated. The lungs were clear, but percussion of the heart revealed slight enlargement to the left. I heard a grade III systolic murmur at the apex but diastole was clear. The liver edge could be felt just below the costal margin and the spleen tip was definitely palpable.

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I found nothing else abnormal. Here is the patient's room. He regained consciousness the second day and is clear mentally, but the left arm and left lower facial muscles are very weak. *(They enter the patient's room.)*

PART III

VISITING M.D: *(Examining the patient)* The left biceps and triceps reflexes are now increased. Note the petechiae in both conjunctival sacs. There is no abnormal pigmentation of the gingival borders or the skin. I believe the apical systolic murmur is organic; the heart does seem enlarged to the left by percussion. *(They leave the room.)* What laboratory reports do you have?

ATTENDING M.D: The hemoglobin was 11.5 gm., the erythrocyte count 4.3 million, and the leukocyte 12,000 with 78% neutrophils. No abnormal cells were observed. Platelet count was normal; sedimentation rate 46 mm. per hour. The urine contained 50 to 100 red cells per highpower field but was otherwise negative. A spinal tap was performed and revealed grossly bloody fluid under a pressure of 220 mm. of water. I did not test the dynamics.

VISITING M.D: I should hope not. No other laboratory studies?

ATTENDING M.D: Well, we have kept the patient strictly in bed. So the only roentgenogram is a portable chest film. The lung fields were clear. The roentgenologist was unable to say whether the heart was enlarged on the portable film. The blood urea nitrogen was 12 mg. per cent and the serum sodium 143 mEq. per liter. A fasting blood sugar on admission was 100 mg. per cent. An electrocardiogram showed left axis deviation and possibly some left ventricular hypertrophy.

VISITING M.D: Are you satisfied with a diagnosis of subarachnoid hemorrhage?

ATTENDING M.D: I was at first, but the patient definitely is not doing well. He has been febrile most of the time with oral temperatures between 99 and 100°. I have tried to reconcile the chronic symptoms of weakness and fever with the acute illness which seems to be definitely a subarachnoid hemorrhage. The hepatosplenomegaly must be investigated. I had planned to allow a week or so of strict bed rest before looking for a cause of the other signs and symptoms.

"Well, Senator, this time you had better walk for reelection."

PART IV

VISITING M.D: I certainly agree that a critically ill patient should not be subjected to a barrage of laboratory studies. However, the combination of subarachnoid hemorrhage, hepatosplenomegaly, and petechiae

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and a cardiac murmur strongly suggests subacute bacterial endocarditis. Get blood cultures immediately and, if positive, do antibiotic sensitivity tests of the organism recovered and begin appropriate therapy.

ATTENDING M.D.: *(The next day)* Of the 3 blood cultures taken yesterday, 2 were positive for *Streptococcus viridans.* The organism proved to be sensitive to 0.1 units penicillin per millimeter. I began crystalline penicillin, 250,000 units every three hours.

VISITING M.D.: That should be adequate. Continue treatment at least one month.

ATTENDING M.D.: I'm afraid I handled this case rather badly. The persistent anorexia, fatigue, and sweats beginning after a dental extraction in a patient with a cardiac murmur should have indicated endocarditis to me.

VISITING M.D.: It's true that many cases of subacute bacterial endocarditis are initiated by the bacteremia which follows dental work, especially extraction. Of course, a rheumatic or congenital cardiac lesion must be present. Our patient probably has mitral insufficiency. Also, think of subacute bacterial endocarditis whenever subarachnoid hemorrhage occurs. The most common cause of these vascular accidents is a congenital aneurysm of a cerebral vessel, but subacute bacterial endocarditis can lead to a mycotic cerebral aneurysm, which may rupture. In general, one prefers to make a single diagnosis but, in this case, subarachnoid hemorrhage was simply a sign of the primary disease.

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Life's Weary Moments

Think of a gag that fits the illustration. For every issue a new gag is published and the author is sent $5. The Mar. 15 winner is

Milan D. Chepko, M.D.
Ashtabula, Ohio

Mail your caption to The Cartoon Editor Caption Contest No. 1 MODERN MEDICINE Minneapolis 3, Minn.

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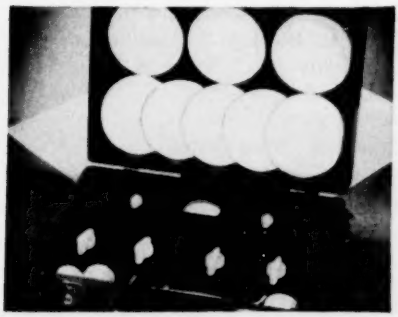
a machine for the electrical contraction of inervated voluntary muscles . . .

WHEN muscles are inactivated, as in plaster casts, movement by voluntary action or electrical stimulation may be desirable to prevent degeneration or adhesion of muscle fibers. This therapy is of great value because it tends to increase circulation in the involved muscle. By intelligent use during the *after* treatment of fracture reduction there may be lessening of scar tissue, reduced infiltration of the muscles, tendons and joints and a better maintenance of circulation.



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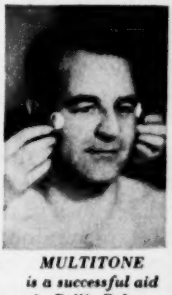

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Basic Science Briefs

Biochemistry

Function of Ascorbic Acid

The vitamin ascorbic acid is a necessary coenzyme in the metabolic oxidation of the amino acid tyrosine. Thus at least one of the biologic functions of the acid may be understood, remark Robert R. Sealock and Ruth L. Goodland of Iowa State College, Ames. The enzyme apparently removes hydrogen from the tyrosine keto acid by means of the dehydroascorbic acid form of the vitamin, with subsequent transfer to oxygen and regeneration of dehydroascorbic acid.

Science 114:645-646, 1951.

Pediatrics

Newborn Adrenals

The adrenal gland is one-third the size of the kidney at birth and loses half its weight in the first two weeks, while much of the cortex degenerates. Size is regained by the age of 12 and doubled at 40. The fetal hypophysis is apparently essential to the original hypertrophy. In the first few days of life, when cortical involution is most rapid, 17-ketosteroid excretion is high, showing duality of the glandular cortex, remarks Dr. Alfred M. Bongiovanni of the University of Pennsylvania, Philadelphia. Throughout life, corticoid excretion continues at a constant rate depending on body surface area, but 17-ketosteroid output is low until onset of puberty. Possibly, two independent adrenocorticotropic hormones stimulate different cells of the adrenal at different rates corresponding to secretion. In the neonatal period, the adrenal is more strongly affected by ACTH during the second week of life than earlier. Hypoadrenalism of the newborn infant cannot be proved, but the pathways that allow full response to stress may be undeveloped.

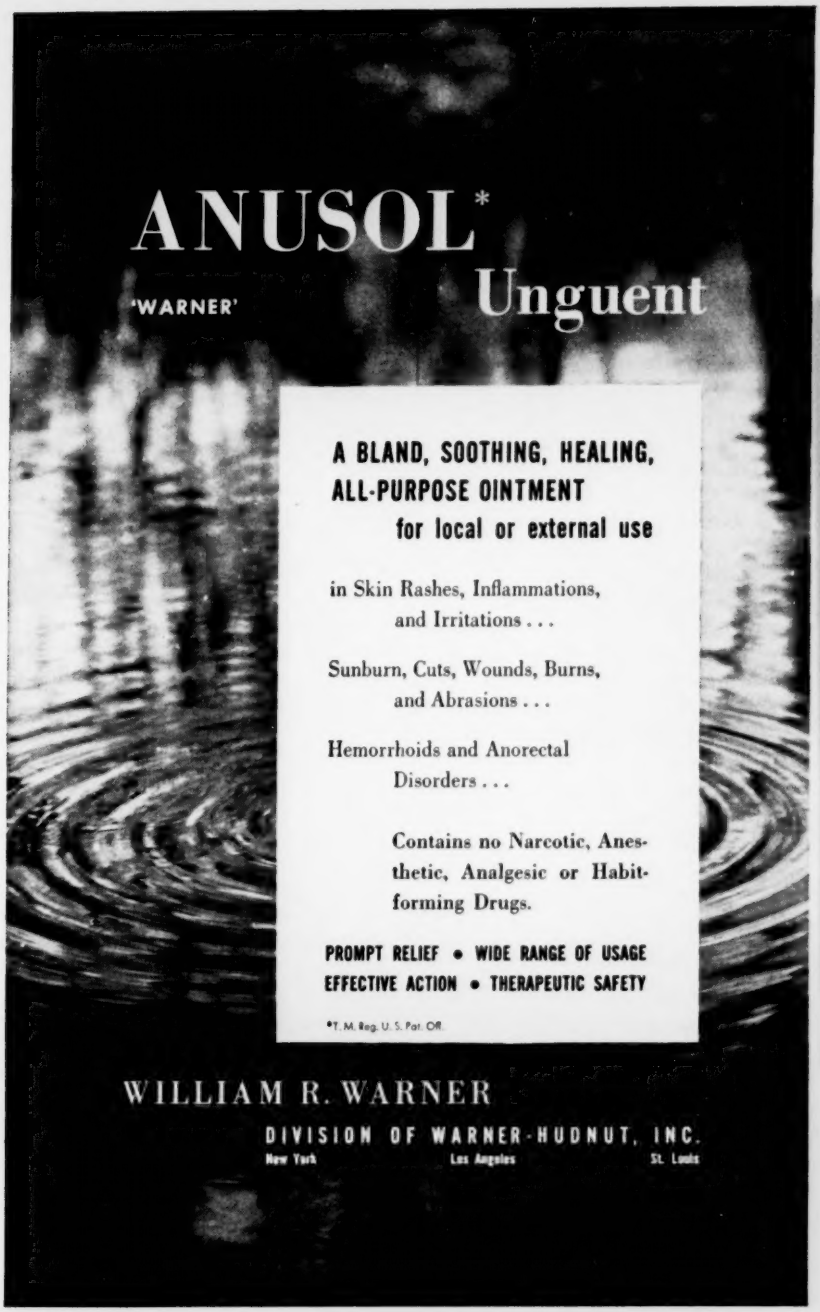
Am. J. M. Sc. 222:710-720, 1951.

Cardiology

Experimental Endocarditis

Dogs with large arteriovenous fistulas are very susceptible to endocarditis after the injection of bacteria intravenously. *Streptococcus hemolyticus* produced heart lesions in 6 of 7 dogs with large femoral or iliac shunts; *S. viridans* and noncoagulating *Staphylococcus* were less effective. The pathogens were incapable of producing endocarditis in dogs with small fistulas or without fistulas. Dr. J. R. R. Bobb and associates of the University of Minnesota, Minneapolis, find that the lesions involve mitral, aortic, and tricuspid valves primarily. Most lesions were of the bacterial type with scattered small areas resembling rheumatic endocarditis. Acute proliferative glomerulonephritis developed coincidentally with endocarditis in several cases.

Journal-Lancet 71:455-461, 1951.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Oncology

Carcinogenic Inhibition

Malignant tumors initiated by the feeding of azo dye are less likely to form in rats if nitrogen mustard is also administered. Rats given food containing the carcinogenic dye for ten to twelve weeks have a liver tumor incidence of 90 to 100%. When nitrogen mustard is injected subcutaneously during the first two weeks of dye feeding, the tumor incidence is reduced to 30 to 60%. When injected during the last four weeks of the feeding period, nitrogen mustard does not avert tumor growth. Chemical studies of Dr. A. Clark Griffin and associates of Stanford University, Stanford, Calif., indicate that the inhibition is due to the nucleotoxic properties of the nitrogen mustard. Mitosis initiated by the dye is impeded if the nitrogen mustard reaches the cell before mitosis begins. This inhibition is reflected by a decreased desoxyribonucleic acid synthesis by the liver cells. The azo dye used is 3'methyl-4-dimethyl aminoazobenzene.

Cancer Research 11:868-872, 1951.

Biochemistry

Nutrition and Diabetes

Diet affects the incidence of diabetes in male rats that have had 95% of the pancreas removed. Drs. Ricardo R. Rodriguez and Willard A. Krehl of Yale University, New Haven, Conn., find that diabetes develops in only 33% of such rats after six months on a high-protein diet, but in 80% of the animals fed high-fat or carbohydrate diets. Only a slight reduction is observed in the incidence and severity of diabetes when cholesterol is added or choline omitted from the high-carbohydrate rations. Cataracts were more apt to develop in the rats given high-carbohydrate diets than in those fed a high-protein meal, and none appeared with the high-fat feedings. Insulin treatment prevents cataract development in rats with diabetes of at least ten months' duration. Diabetic cataracts are most likely to appear in old rats with severe diabetes of long duration.

Yale J. Biol. & Med. 24:103-108, 1951.

Oncology

Immunization Against Cancer

Some ethylenimine derivatives not only suppress malignant growth in rats but make the animals immune to future implants. At Rutgers University, New Brunswick, N. J., Dr. M. L. Crossley and associates successfully treated sarcoma 231 in 50 to 75% of rats, employing small dosages of 2,4,6-triethylenimino-s-triazine. Treatment was started one or two weeks after the graft, when neoplasms were thriving, and continued for two or three weeks. Results were most satisfactory with 0.02 mg. per kilogram injected intraperitoneally twice a day. After total regression, rats were completely resistant, so that later implants failed to grow, although untreated animals remained susceptible after excision of tumor. Promising results were obtained with 2,4,6-tris(2-methylethylenimino)-s-triazine and hexamethylene diethylenurea.

J. Nat. Cancer Inst. 12:305-321, 1951.

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and phenobarbital
are indicated...

RUTAMINAL*

provides the myocardial stimulation of aminophylline, the sedation of phenobarbital, *plus* the dual protection of rutin and ascorbic acid against vascular accidents due to abnormal capillary fragility

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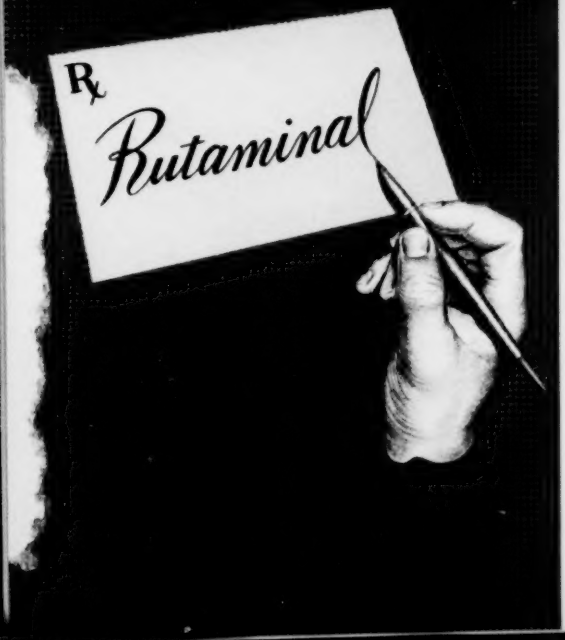

each tablet contains:

Rutin	60 mg.
Ascorbic Acid	25 mg.
Aminophylline	100 mg.
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(WARNING: May be habit-forming)

supplied: Bottles of 100 and 1000 tablets

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Short Reports

Experimental Surgery

Wire for Aortic Aneurysm

Magnesium wire containing 2% aluminum is approximately twice as efficacious as stainless steel wire for production of a clot in saccular aortic aneurysm. However, in a fusiform dilatation, coagulation would probably be so rapid that embolism might result. The alloy adheres to the intima, decreasing possibility of a free thrombus. Since the metal is almost dissolved within three weeks and may in time absorb, erosion of the vessel is unlikely. Drs. Peter Stone and Jere W. Lord, Jr., of New York University, New York City, after comparing the materials in aortas of 30 dogs, also found the alloy more satisfactory than pure aluminum, which is extremely brittle.

Surgery 30:987-993, 1951.

Allergy

Bronchial Asthma Therapy

Neosuprel, a sympathomimetic amine and a derivative of Isuprel, reduces the bronchospasm of asthma without producing undesirable cardiovascular effects. Neosuprel in 2.5% solution is somewhat less effective than 1% Isuprel in counteracting histamine- or methacholine-induced bronchospasm, but the effects of Neosuprel on blood pressure and heart rate are negligible. Dr. J. Aaron Herschfus and associates of Tufts College, Boston, and Boston City Hospital use 1 cc. of 2.5% Neosuprel solution in an oxygen aerosol. Six inhalations of this dose induced a 50% increase in maximum breathing capacity and a 450-cc. average increase in vital capacity for 30 patients with asymptomatic or slight bronchial asthma. Of the patients studied, 75% preferred Neosuprel to Isuprel. Sublingual tablets containing 10 mg. of Neosuprel produced undesirable side reactions and did not relieve bronchospasm.

Ann. Allergy 9:769-775, 1951.

Endocrinology

Hyperthyroidism Therapy

Methimazole (Tapazole) is apparently a potent antithyroid drug. Daily doses are only one-tenth as large and courses less than one-third as long as those needed with other antithyroid agents. Chances of toxicity are also much reduced. Drs. Bernard L. Hallman and Philip K. Bondy of Emory University and Grady Memorial Hospital, Atlanta, prescribe 5 mg. four times daily as a rule, occasionally up to 40 mg., for an average of about eight to nine weeks. In 35 patients, preparation for subtotal thyroidectomy was adequate with two or three weeks of additional iodine therapy, and methimazole did not interfere with subsequent uptake of radioactive iodine.

Am. J. Med. 11:724-729, 1951.

Oncology

Cancer-inhibiting Drug

Oenanthol, a distillate of castor oil, has important bactericidal and anticancer properties. Bactericidal potency against staphylococci and colibacilli is 6 to 10 times greater than that of undecylenic acid, the other chemical substance of castor oil distillate. J. Solomides of the Sceaux Laboratory, Paris, has produced a stable aqueous solution of oenanthol which was used to treat 60 patients with advanced and inoperable cancer. A daily dose of 2 mg. per kilogram of body weight resulted in suppression of pain with improvement of physical and functional activities affected by the tumor and considerable inhibition of tumor growth. In some cases cures were apparently attained. Daily parenteral injections of 60 to 120 mg. of oenanthol are effective in herpes zoster and flat warts.

J.A.M.A. 147:1160, 1951.

Endocrinology

Adrenal Dysfunction in Arthritis

Abnormal production of steroid adrenal hormones is a factor in some cases of rheumatoid arthritis. Urinary excretion of 17-hydroxy pregnanolone, a metabolite not encountered in healthy or diseased subjects except with obvious adrenal disorders such as tumor or virilism, occurred in 3 male and 2 female patients, reports Dr. Konrad Dobriner of New York City. Normal steroid hormone metabolites were rather low; endocrine balance was only partially restored by cortisone or ACTH.

Bull. Rheumatic Dis. 2:5-6, 1951.

Gynecology

Tubal Occlusion Therapy

Uterotubal insufflation with gas and indigo carmine combined with culdoscopic visualization often opens occluded fallopian tubes. Dr. Albert Decker of New York Polyclinic Medical School and Hospital, New York City, employed pressure therapy under 200 to 300 mm. of mercury in 10 patients and established patency in 6; 1 patient became pregnant; none had serious discomfort or complications.

Fertility & Sterility 2:487-497, 1951.

Physical Medicine

Fatigue Potentials

Electromyograms of muscles affected by poliomyelitis show a decreasing rather than increasing voltage as the muscles work to fatigue. Using loads of one-half of greatest lifting capacity of the muscle and a rate of 58 lifts per minute, Dr. G. Clinton Knowlton and associates of Emory University, Atlanta, and the Georgia Warm Springs Foundation find that the action potentials of normal muscles at 100% fatigue are about 180% of initial voltage. Muscles affected by poliomyelitis of grades G plus to F plus show a progressive decrease of action potential from fatigue until, at about G minus 3, the action potential is less than the initial value. By functional exercises determination of some muscles with this reversed response was demonstrated. The test may be used to aid in the detection of nonresponsive muscles.

Arch. Phys. Med. 32:648-652, 1951.

"You are old, Father William," the young man said,
"And your hair has become very white;
"And yet you incessantly stand on your head—
"Do you think, at your age, it is right?"

LEWIS CARROLL

Father William's antics might well stand as the symbol of good health and energy we all hope to promote in older people today, as medical science accumulates more and more valuable knowledge of geriatric nutrition.

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Thiamine Hydrochloride	36 mg.
Riboflavin	3 mg.
Niacinamide	180 mg.
Panthenol	6 mg.
(Equivalent to approx. 7 mg. calcium pantothenate)	
Pyridoxine Hydrochloride	6 mg.
Vitamin B_{12}	12 mcg.

—in a delightful cola-flavored syrup.

—Bottles of 8 fl. oz. and one pint.

Samples on request.

Surgery

Chest Wall Excision for Cancer

In surgery for mammary carcinoma, part of the chest wall may be removed and immediate plastic repair done. The procedure is useful for [1] local recurrence extending to bone, [2] severe radiation necrosis, or [3] malignant involvement of the internal mammary chain of lymph nodes. During the past three years, 25 patients have been so treated at the Memorial Center for Cancer and Allied Diseases, New York City. Dr. Jerome A. Urban uses endotracheal gas-oxygen-ether anesthesia for the operation. Up to three-fourths of the sternal width and portions of 4 ribs may be excised at one time, and the underlying pleura is usually removed with the specimen. The defect is filled by fascia lata or tantalum-mesh gauze, sutured under tension to the deep surfaces of osseous muscular borders. Full-thickness flap pedicle grafts are developed from skin and subcutaneous tissues of the neck, opposite breast, chest, or abdominal wall. No functional disability results.

Cancer 4:1263-1285, 1951.

Hematology

Contaminants in Transfusions

Fatal transfusion reactions may result from bacteria in donor blood if sufficient incubation occurs before use, especially if the inoculum is large. Dr. Abraham I. Braude and associates of Ann Arbor, Mich., obtained organisms from 38, or 2.24%, of 1,697 consecutive pints cultured before removal from the bank. Most blood tested was bactericidal, and only one bottle had sufficiently heavy growth to induce fever. In 84 blood specimens inoculated with 200 bacteria per cubic centimeter, contaminants were killed or suppressed at room temperature. In 78 specimens, heavy growth resulted but not until more than six hours later, a longer time than required for transfusion. However, killing power sometimes disappeared after four weeks of refrigeration. In vitro, contaminating organisms occasionally caused hemolysis, clotted blood by consuming citrate, or changed blood type from O to AB. Rabbits transfused with blood containing large numbers of staphylococci became feverish but were otherwise unharmed. Diphtheroids were pyrogenic, with variable toxicity. *Aerobacter aerogenes* generally produced fatal shock.

Proc. Central Soc. Clin. Research 24:18, 1951.

Education

New Medical School

Yeshiva University is planning a nonsectarian medical school of 400 students, to be affiliated with the proposed Municipal Hospital Center of 1,250 beds in Bronx, N.Y. Construction will start next autumn. New educational ideas will be introduced in several major fields, with emphasis on well-rounded clinical teaching almost from the first day. Social and economic problems, home care of geriatric and chronic diseases, voluntary group practice, ethical standards, preventive medicine, and legal subjects will be taught, and the curriculum will be fluid to meet changing needs. Director is Dr. Harry M. Zimmerman of Montefiore Hospital.

One simple way to promote GOOD NUTRITION

WHENEVER a worried mother asks you how to "make" her baby eat more, you can help her understand that a baby gets full benefit from his food when he *enjoys* it.

No baby can be expected to thrive nutritionally and emotionally if mealtimes are marred by coaxing and conflict.

It is fortunate for your young patients that Beech-Nut Foods combine fine nutritive values with appealing flavor. Now, with more varieties to choose from than ever before, Beech-Nut makes it easier for mothers to please your young patients and *keep* mealtimes happy!

A wide variety for you to recommend: Meat and Vegetable Soups, Vegetables, Fruits, Desserts—*Cooked* Cereal Food, *Strained* Oatmeal and *Cooked* Barley.

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Every Beech-Nut Baby Food has been accepted by the Council on Foods and Nutrition of the American Medical Association and so has every statement in *every* Beech-Nut Baby Food advertisement.

Antibiotics

Moniliasis and Aureomycin Therapy

Growth of *Candida albicans* is stimulated by aureomycin hydrochloride prepared in capsules for oral administration, though crystalline aureomycin for parenteral use has no effect on the organism. The stimulatory factor may be responsible for the frequent mucocutaneous lesions, such as pruritus ani, vulvovaginitis, and stomatitis, and the high incidence of moniliasis seen with aureomycin therapy. Dr. Roberts B. Pappenfort, Jr., and Edith Spitzer Schnall of the Columbia–Presbyterian Medical Center, New York City, were able to isolate *C. albicans* or a yeast-like fungus from all of 16 patients with onset of mucocutaneous lesions after oral aureomycin therapy. In vitro tests by the diffusion plate method demonstrated a definite stimulation of *C. albicans* by solutions of the aureomycin. The stimulatory factor is not destroyed by boiling or high *p*H and is probably an impurity.

Arch. Int. Med. 88:729-735, 1951.

Education

Administrative Medicine

Columbia University is now offering physicians a degree in Administrative Medicine. Included in the curriculum are courses in the management of hospitals, health insurance programs, industrial activities, and medical schools. Dr. E. Dwight Barnett, former director of Harper Hospital, Detroit, heads the new Institute of Administrative Medicine.

Oncology

Radioactive Gold for Ascites

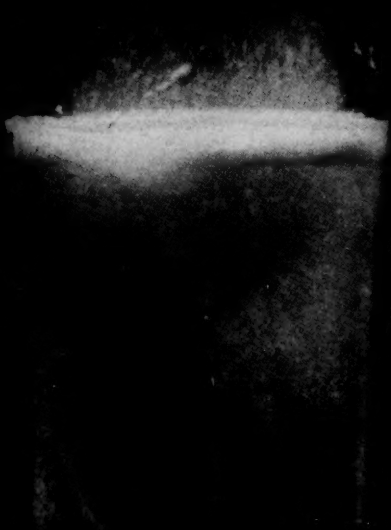
Formation of fluid in the abdomen or chest with advanced malignant disease is generally suppressed by colloidal radioactive gold. From 25 to 35 millicuries is given for pleural effusions and 100 to 125 for ascitic conditions. The principal aim of the therapy, explains Dr. Richard H. Chamberlain and associates at the University of Pennsylvania, Philadelphia, is to relieve discomfort. Results are outstanding with Hodgkin's disease and lymphosarcoma but also good with ovarian cancer and some more radioresistant tumors. The Au^{198} employed is prepared in the Oak Ridge nuclear reactor and has a half-life of 2.7 days. The apparatus and technic of administration require a radioactive isotope laboratory.

Cardiology

Drugs for Heart Disease

Betaine and glycocyamine often produce a feeling of well-being in a patient with heart disease but do not seem to improve the underlying condition. Drs. Ashton Graybiel and Charles A. Patterson noted little effect on congestive failure, cardiac enlargement, or the electrocardiographic pattern of left ventricular strain among 16 cardiac cases at the Naval Air Station, Pensacola, Fla. Work tolerance sometimes increased slightly, but a better sense of well-being occasionally resulted in greater activity and overwork of the heart. Daily dosage was about 30 mg. of glycocyamine and 90 mg. of betaine per pound of body weight.

Ann. West. Med. & Surg. 5:865-875, 1951



'Pen-Eff' is one of the most interesting developments in oral penicillin therapy since the introduction of this antibiotic. 'Pen-Eff' is an *effervescent* penicillin tablet containing *250,000 units* of highly buffered crystalline potassium penicillin G. The tablet is dissolved in water and taken orally as a sparkling, pleasant-tasting liquid.

features:

1. **'Pen-Eff' contains 300% more buffering alkali than any other penicillin tablet.**
2. **'Pen-Eff' is equally effective on a fasting or non-fasting stomach. It may be administered regardless of mealtime. Consequently, you can plan dosage schedules with maximum convenience and flexibility.**
3. **'Pen-Eff' is effective with only 3 doses daily.**

dosage:

Adults and Older Children: 2 tablets, t.i.d.
Younger Children: 1 tablet, t.i.d.

directions:

Drop 2 'Pen-Eff' tablets into a half glass (4 fl. oz.) of water (for 1 tablet dose use a quarter glass of water). When tablets have completely dissolved (about a minute and a half), drink immediately. Water is the preferred vehicle. If desired, other liquids—fruit juices, cola drinks—may be used.

precaution:

In those patients requiring sodium restriction it should be noted that each 'Pen-Eff' tablet contains 0.49 Gm. of sodium.

available:

On prescription only, in bottles containing twelve 250,000 unit effervescent tablets—or a total of 3,000,000 units of crystalline potassium penicillin G.

IMPORTANT: **Because the 'Pen-Eff' bottle is specially designed to keep out moisture, always be sure to write your prescriptions for 12 'Pen-Eff' tablets—or multiples thereof. 'Pen-Eff' is unstable when not dispensed in the original package.**

Smith, Kline & French Laboratories, Philadelphia

'Pen-Eff' Trademark

Enzymes

Diabetic Gangrene

Tryptar, a purified crystalline form of trypsin, rapidly digests necrotic tissue and greatly hastens healing of diabetic lesions. Saul S. Samuels, M.D., of New York City first eliminates infection, which develops in about 90% of cases. Affected areas are incised and drained, if necessary, and Azochloramid is employed. A combination of terramycin and penicillin is particularly effective. When dead and living tissues are clearly demarcated, Tryptar is applied in wet dressings, using 250 mg. in 25 cc. of Sorensen's phosphate buffer solution. The bandage is moistened with freshly prepared solution every three hours. Debridement that formerly took months may now be completed in a week.

Angiology 2:589-590, 1951.

Biochemistry

Parasympathetic Block

Prantal, a parasympathetic blocking compound, primarily inhibits gastric motility and secretion. Doses which elicit this selective action do not produce mydriasis in animals and rarely cause mydriasis or xerostomia in human beings. Intravenous doses are 50 to 100 times more effective in blocking the parasympathetic than the sympathetic system, according to Dr. S. Margolin and associates of Bloomfield, N. J. In dogs, oral Prantal delays gastric emptying better and longer than methantheline bromide and reduces volume and titratable total acid of gastric secretions. Topical applicaton of 1% Prantal to rabbit eyes does not cause mydriasis, as does 0.1% methantheline bromide.

Proc. Soc. Exper. Biol. & Med. 78:576-580, 1951.

Rapid Relief

FOR MUSCULO-SKELETAL ACHES AND PAINS

RUB A-535

- ARTHRITIS
- RHEUMATISM
- BURSITIS
- MYOSITIS
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Rub A-535's combination of time-proven ingredients, in a modern non-greasy, stainless, vanishing base facilitates rapid analgesic and counter-irritant action in the symptomatic treatment of a wide range of musculo-skeletal conditions.

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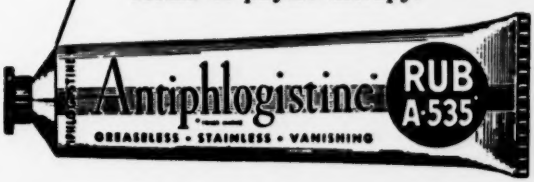
Rub A-535 may be used following diathermy, infra-red lamps, baking and other forms of physio-therapy.



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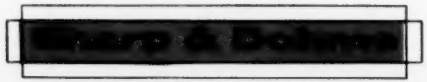
Because PENTRESAMIDE®-250 Tablets combine three of the most soluble, least toxic sulfonamides with orally effective penicillin, they are effective in a wide range of systemic bacterial infections. Each tablet contains 0.5 Gm. total sulfonamide (0.1 Gm. sulfamerazine, 0.2 Gm. sulfadiazine and 0.2 Gm. sulfamethazine) with 250,000 units potassium penicillin-G. Bottles of 60 tablets (slotted). Sharp & Dohme, Philadelphia 1, Pa.




250
Tablets
enicillin

Roentgenology

Irradiation of Growing Spine

Roentgen therapy of children's vertebrae may interfere with spinal development, as was revealed by examination of 34 patients approximately two to three years after radiologic treatment. Doses under 1,000 tissue roentgens at any age produce no permanent deformity. From 1,000 to 2,000 r causes only slight disturbance after the age of 2 years, but larger amounts always damage and usually distort the column, warn Drs. Edward B. D. Neuhauser and Martin H. Wittenborg of Harvard University, Boston. Benign exostoses are more common after epiphyseal exposure. Irradiation for paravertebral tumor should be directed to produce the least possible disturbance to spinal development.

Neuropsychiatry

Cell Changes in Dementia

Abnormal changes in nerve cells of the prefrontal cortex are constant during dementia praecox and are exhibited chiefly by the nucleus and cytoplasm. Drs. James W. Papez and J. F. Bateman of the Laboratory for Biological Research, Columbus, report 70 biopsies in which inclusion bodies developed in cytoplasm and desoxyribonucleic acids increased in nucleus early in the disease. A great quantity of nuclear sap inflates the nucleus, and cytoplasm becomes stretched and low in Nissl substance. Naked nuclei are profuse when the cytoplasm breaks away from the nucleus. Other changes may include pyknosis, collagen-like droplets in cytoplasm, neurofibrillar damage, gliosis, and proliferation of mesoglia and microglia nuclei around blood vessels. Suspensions of such tissue studied by darkfield microscope show pleomorphic organism, which is apparently a causal factor common to all the changes.

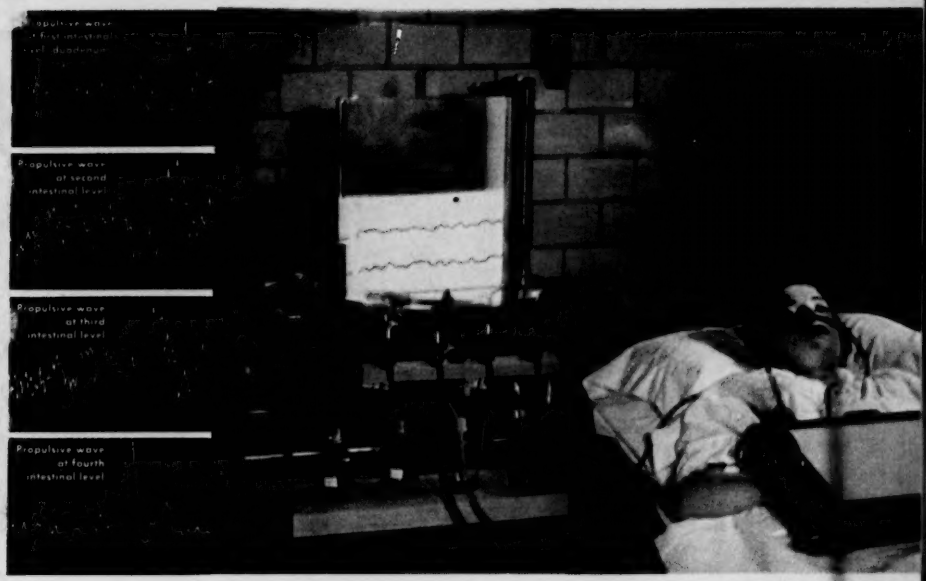
J. Nerv. & Ment. Dis. 114:400-412, 1951.

Microbiology

Antibiotic Antagonism

When given with penicillin, either chloramphenicol, aureomycin, or terramycin may interfere with the antibacterial action of the penicillin. After studying results in vitro and in mice infected with human pathogens, Dr. R. S. Speck and associates of the University of California, San Francisco, note that bacteriostatic amounts of aureomycin or terramycin prevent the effective action of doses of penicillin which are bactericidal when given alone. Larger amounts of these drugs and penicillin are not antagonistic but do not have additive or synergistic action. Chloramphenicol is especially prone to interfere with the therapeutic effects of penicillin and inhibits penicillin action over a wide range of concentration. Biologic activity is apparently responsible for the antagonism, since prolonged heating of aureomycin destroys that antibiotic's bacteriostatic activity and penicillin antagonism. Evidence of physical or chemical interference is lacking. The antagonism is probably related to a modification of the bacterial population by the interfering drug. Patients receiving combined therapy should be observed for evidence of antibiotic antagonism.

Arch. Int. Med. 88:168-174, 1951.



Spasmolysis at its Best . . . by

LIVING TEST

Intubation studies[1,2,3] increasingly confirm the findings of controlled clinical tests and broad professional experience; they dramatically demonstrate the *marked superiority of natural belladonna alkaloids* over the synthetics in relieving smooth muscle spasm.[2,3]

Donnatal employs precise proportions of the principal alkaloids of belladonna, together with a minimal phenobarbital dosage, to intensify the belladonna effects and help correct emotional factors contributing to the provocation of spasm.

REFERENCES: 1. Chapman, W. P., Rowlands, E. N., and Jones, C. M.: New England J. Med., 243:1, 1950. 2. Kramer, P. and Ingelfinger, F. J.: Med. Clin. North America, 32:1227, 1948. 3. Posey, E. L., Bargen, J. A., and Dearing, W. H.: Gastroenterol., 11:344, 1948.

FORMULA: Each tablet, each capsule, and each 5 cc. (1 teaspoonful) of Elixir, contains 0.1037 mg. hyoscyamine sulfate, 0.0194 mg. atropine sulfate, 0.0065 mg. hyoscine hydrobromide, and 16.2 mg. (¼ gr.) phenobarbital.

A. H. ROBINS CO., INC., RICHMOND 20, VA.

Donnatal®

Robins

TABLETS • CAPSULES • ELIXIR

WHENEVER and WHEREVER spasm of smooth muscle causes pain or dysfunction

first aid for the *"digestive casualty"*

Entozyme greatly simplifies a broad therapeutic approach to many often complex disturbances of the gastro-intestinal tract, through its provision of potent amounts of the principal digestive enzymes: pepsin, pancreatin (with its lipase, amylase, and trypsin), and bile. Its special "tablet-within-a-tablet" construction controls the release of each essential digestive enzyme at its own appropriate gastro-enteric level... in its optimal state of enzymatic activity. This unique action explains the relief gratifyingly elicited in so many cases of pathologic or functional impairment of the digestive process.[1,2,3]

REFERENCES: 1. Kammándel, H. et al.: Bull. N. Y. Med. Coll., Flower & Fifth Ave. Hospe. (in press). 2. McGavack, T. H. and Klotz, S. D.: Bull. N. Y. Med. Coll., Flower & Fifth Ave. Hosps., 9:61, 1946. 3. Weissberg, J. et al.: Am. J. Dig. Dis., 15:332, 1948.

FORMULA: Each tablet contains 300 mg. pancreatin, U.S.P., 250 mg. pepsin N.F., and 150 mg. bile salts.

A. H. ROBINS CO., INC., RICHMOND 20, VA.

ENTOZYME®

Robins

A SINGULARLY effective, DOUBLE-layered tablet, with TRIPLE-enzyme digestive action.

Gastro-soluble enzymes are released from outer shell (A) in stomach; entero-active enzymes from inner core (B) in duodenum and jejunum.

Endocrinology

Types of Myxedema

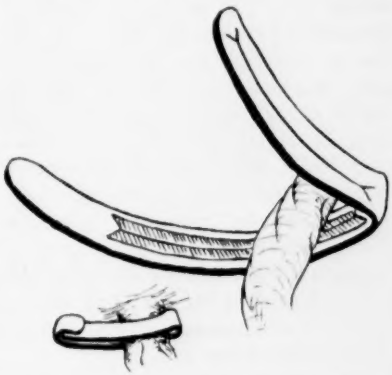
Tests showing thyroid response to pituitary stimulation indicate which gland is primarily deficient in a case of myxedema. At Philadelphia General Hospital, Dr. William H. Perloff and associates employ thyrotropic hormone with radioiodine tracer technic adapted from the method of Lasche and associates. To obtain a base line of thyroid function, 50 microcuries of I^{131} is administered, and twenty-four hours later the percentage left in the gland is measured with a Geiger counter. In two to four weeks, 20 to 30 mg. of thyrotropic hormone per day is injected intramuscularly for three days. A second tracer test is performed on the fourth day and the uptake measured twenty-four hours later. Euthyroid iodine values average 20.8% higher than the original level and those for primary hypothyroidism 7.6% higher. With pituitary myxedema the increase is 32.2%.

J. Clin. Endocrinol. 11:1495-1502, 1951.

Obstetrics

Umbilical Cord Clamp

An appliance of aluminum makes a light, sturdy umbilical cord clamp which is easy to fasten. The device is formed from aluminum wire rolled flat and without sharp edges. The clamp can be doubled over a cord of any size. The longer arm of the folded appliance is then turned back over the shorter arm to lock the ends. The resulting clamp can be bent in an arc to increase the pressure. In reporting satisfactory use of the device, Dr. John A. Haugen of the University of Minnesota, Minneapolis, explains that after the clamp is put on, blood is milked



back on the distal side for about an inch, where a forceps is applied. No blood spatters when the cord is cut between the clamp and forceps.

Journal-Lancet 71:533, 1951.

Dermatology

Antifungal Agent

The antihistamine drug diphenylpyraline hydrochloride often alleviates fungous infections when other preparations are ineffectual. Among sensitive organisms are *Trichophyton gypseum, T. purpureum, Epidermophyton inguinale, Microsporum lanosum,* and *Monilia albicans.* A 2% diphenylpyraline solution in tap water or 2% ointment is employed by Dr. Oscar Sokoloff of New Brunswick, N. J. In a series of 153 cases, improvement was greatest with tinea pedis and almost as good with tinea cruris, tinea corporis, tinea axillaris, tinea capitis, and tinea versicolor.

Arch. Dermat. & Syph. 64:754-756, 1951.

Experimental Medicine

Sex-limited Hypertension

High blood pressure is produced by large doses of desoxycorticosterone acetate (DCA) in adult male dogs and in immature dogs of either sex but not in adult bitches. This may indicate that the ovary has an antagonistic effect on the hypertensive action of DCA. Drs. Paolo de Muro and Paolo Rowinski of the University Medical School, Sassari, Italy, believe this sex limitation to be due to a protective action exerted by estrogens. Further support of this theory is found in the fact that climacteric hypertension is often relieved by folliculoid therapy.

Acta med. Scandinav. 141:70-76, 1951.

Pediatrics

Serologic Evaluation of Tuberculous Activity

A useful index to the activity of tuberculous disease in children is supplied by Middlebrook-Dubos hemagglutination reaction, but only if the results are interpreted in relation to the entire clinical picture. Drs. H. W. Anderson and R. V. Platou of Tulane University, New Orleans, warn that a negative reaction in the sera from infants or children under 6 years of age is not to be trusted, although a positive result may be significant. Reactions to the M-D test are likely to be negative or only weakly positive in sera from children with obviously terminal tuberculosis, from those with apparently arrested or healing disease, and from more than half of those under 6 years of age with obviously active tuberculosis. The difference in titer is believed to be primarily an age factor and not a consequence of the longer host experience of the older children. The Mantoux test exerts a distinct but transient provocative effect on the level of humoral antibodies in a small number of both positive and negative reactors to the skin test. Blood for serologic study should be drawn just before or at the time a tuberculin test is made.

Pediatrics 8:498-505, 1951.

Roentgenology

Radiation of Nonmalignant Lesions

Roentgen treatment is valuable for many noncancerous conditions. Corns, warts, boils, acne, scars, excessive sweating, dermatitis, erythema nodosum, onychomycosis, dermatophytosis, paronychia, rheumatoid spondylitis or arthritis, adenoids, degenerative joint disease, sinusitis, bursitis, herpes zoster, hemangioma, and pruritus ani or vulvae are among lesions often alleviated by roentgen rays, explains Dr. Sydney J. Hawley of Seattle. For painful corns, 1,000 r of long wavelength radiation in air is generally applied once; for warts on fingers or hands of adults, 500 to 1,000 r. Warts at the nail edge or on hands of adolescents should not be irradiated. Exuberant granulation is inhibited by four to six doses of 100 r applied every other day. Most keloids recede after one or two doses of 300 r three weeks apart, and pain is reduced by 150 r, repeated in two weeks. Symptoms of chronic arthritis in the spine, hips, or knees may be relieved by three to six treatments.

No Other Hypotensive Combines these...

12 IMPORTANT FEATURES

VERILOID®

IN HYPERTENSION

*V*eriloid, a product of Riker Laboratories research, is an alkaloidal extract of hypotensive principles obtained by fractionation from Veratrum viride. It is freed from the dross of the mother substance. Biologically assayed in mammals, withdrop in blood pressure as end point. Generically designated alkavervir.

1. Uniformly potent; constancy of pharmacologic action permits exactitude in dosage calculated in milligrams . . .
2. A unique process of manufacture produces a tablet which dissolves slowly, thus assures Veriloid absorption and action over a considerable period . . .
3. Moderates blood pressure by vasorelaxant action independent of vagomotor effect . . .
4. No ganglionic or adrenergic blocking . . .
5. Lability of blood pressure, so important in meeting the demands of an active life, is not interfered with; no danger of postural hypotension . . .
6. Cardiac output is not reduced . . .
7. No compromise of renal function . . .
8. Cerebral blood flow is not decreased . . .
9. Tolerance or idiosyncrasy rarely develops . . .
10. Hence can be given over long periods in the aim to arrest or lessen progression of hypertension . . .
11. Well tolerated in properly adjusted dosage; does not lead to headache . . .
12. Produces a prompt and sustained drop in blood pressure in all forms of hypertension.

Veriloid is available in 3 dosage forms: Veriloid (plain) in 1, 2, and 3 mg. tablets; Veriloid-VP (Veriloid, 2 mg., and phenobarbital, 15 mg.); Veriloid-VPM (Veriloid, 2 mg., phenobarbital, 15 mg., and mannitol hexanitrate, 10 mg.).

RIKER LABORATORIES, INC. • 8480 BEVERLY BLVD., LOS ANGELES 48, CALIF.

Antibiotics

Anti-Brucella Agent

Xanthellin, an antibiotic prepared from *Bacillus subtilis* cultures, inhibits virulent strains of *Brucella suis* in vitro. The antibiotic differs from others produced by *B. subtilis*, such as subtilin and Bacitracin, in solubility and antibacterial spectrum, according to Dr. R. F. Wachter and associates of Purdue University, Lafayette, Ind. *Br. suis* and *Sarcina lutea* are completely inhibited in twenty-four hours by 0.011 mg. of crude xanthellin per cubic centimeter of medium. When blood serum is added to the medium, inhibition occurs only at xanthellin levels of 0.25 mg. per cubic centimeter or greater. Serum interference may therefore limit the clinical importance of xanthellin. However, a relatively low order of toxicity in mice suggests that a bacteriostatic level may be attained in vivo.

Antibiot. & Chemother. 1:399-404, 1951.

Diagnosis

Liver Function Tests

The one-hour excretion of hippuric acid is a more dependable measure of hepatic dysfunction than is glucuronate excretion or the two-hour hippurate excretion. Dr. I. Snapper and associates of Mount Sinai Hospital, New York City, find that after intravenous administration of 1.77 gm. of sodium benzoate, healthy subjects excrete the greatest amount of hippuric acid, usually over 1 gm., in the first-hour urine sample. Patients with parenchymatous liver disease nearly always excrete less than 1 gm. in the first-hour sample, but the hippuric acid in the second-hour sample sometimes exceeds that in the first and may be as much as 1 gm. The total amount of the acid excreted in two hours does not differ greatly between healthy persons and patients with liver dysfunction. Glucuronate, measured by the napthoresorcinol reaction, in either the one- or two-hour urine after sodium benzoate infusion is definite evidence of liver disease. However, glucuronate may not appear in the urine even when the liver is diseased. Glucuronate detoxification is a supplementary reaction utilized only when glycine detoxification is impaired. Since with severe liver damage both mechanisms may be interrupted, an interpretation of liver function based solely on glucuronate excretion could be misleading.

J. Mt. Sinai Hosp. 18:203-207, 1951.

Roentgenology

Less Radiation Damage

Morphine sulfate injected intramuscularly thirty minutes before roentgen irradiation of the body reduces both the extent of injury and mortality in mice. With premedication, Dr. J. B. Kahn, Jr., of Oak Ridge National Laboratory, Oak Ridge, Tenn., observed a rise in the dose lethal to 50% of male mice from 609 to 830 r. The drug was most effective in amounts of 60 mg. per kilogram. Since anoxia has prevented radiation damage in various organisms, morphine probably acts by depression of the respiratory center and decrease of oxygen tension in radiosensitive tissues.

Proc. Soc. Exper. Biol. & Med. 78:486-489, 1951.

Johnson & Johnson announces

New Professional Package of BAND-AID Plastic Strips 100's

TRADE-MARK

Won't come loose in water. Won't get soggy. Absolutely waterproof. Dirt and grime wash right off the smooth, plastic surface.

Thin, smooth and elastic. Conform to body contours and remain smoothly in place despite body movements. Fit like a second skin.

Grease-resistant. Plastic surface sheds grease and oil.

Stay clean. Plastic surface sheds dirt.

Flesh-colored. Patients appreciate the natural color because it is inconspicuous.

100% Sterile.

Johnson & Johnson

Obstetrics

Frog Test for Pregnancy

During the summer, male frogs are only one-tenth as reactive to chorionic gonadotropin as usual and are therefore less dependable for pregnancy tests at that time. In a standard test, 2 cc. of urine concentrated from 20 cc. is injected into the dorsal lymph sac of *Rana pipiens*. Absence of sperm in a drop of frog urine after four hours is considered negative. From 2 to 12 sperm under the coverglass or 1 or 2 immature or nonmotile forms per low-power field is commonly read as doubtful. A larger number of normal sperm is considered positive evidence. In summer, however, discharge of a few sperm should be considered a positive result. To overcome the seasonal variation, Dr. J. B. Holyoke and E. E. Hoag of Dartmouth College and the Mary Hitchcock Memorial Hospital, Hanover, N. H., suggest that throughout the season, nonreacting frogs could be screened out with hormone of known strength or concentrates could be prepared from 40 to 100 cc. of whole urine to compensate for lack of response.

Am. J. Clin. Path. 21:1121-1126, 1951.

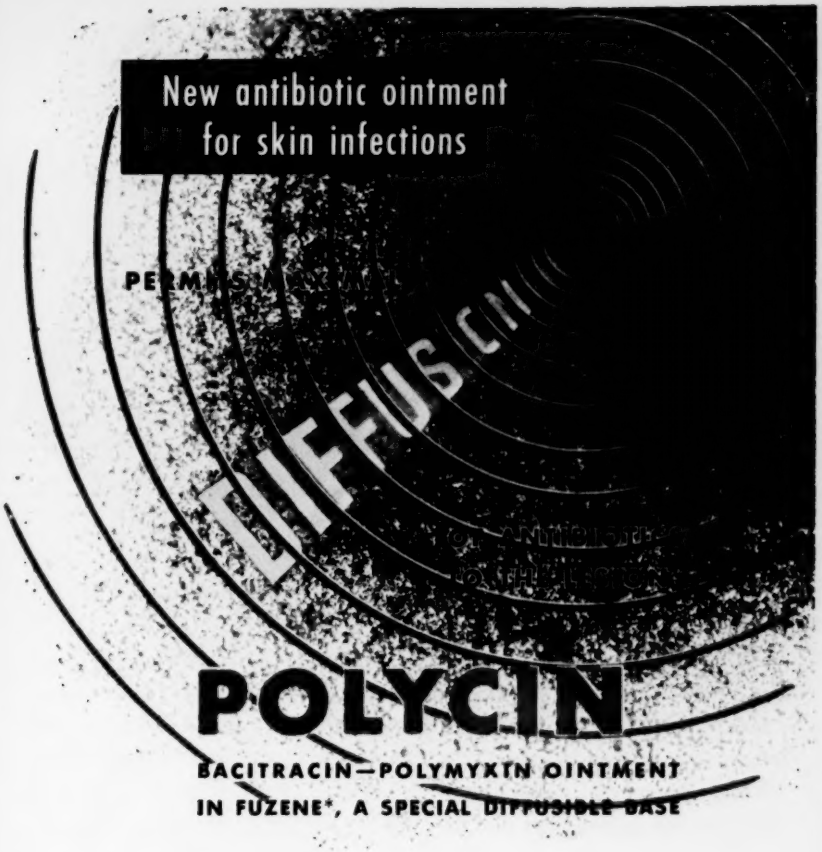
Experimental Surgery

Pulmonic Valvulotomy

A stenotic pulmonary valve may be incised under direct vision through an opening in the pulmonary artery if blood flow is clamped off for a minute or two. The short period of anoxia apparently had no ill effect on dogs operated on by Dr. Frank C. Spencer and associates at the University of California, Los Angeles. The pericardium is cut to expose the main pulmonary artery and outflow tract of the right ventricle, and two stay sutures are placed in the vessel, 0.5 cm. apart, near the sinuses of Valsalva. The artery is occluded with a large bulldog clamp, and a Potts ductus clamp is put on the infundibulum of the right ventricle. With traction on the stay sutures, a 2-cm. longitudinal incision is quickly made between the stitches. A valve cusp is grasped with bayonet forceps and divided to the base. The arterial incision is closed temporarily with a Potts clamp, the occluding clamps are removed, and circulation continues while the wound is repaired with a double row of arterial silk over-and-over sutures. The period of occlusion may be lengthened by a shunt of plastic tubing between the right ventricle and pulmonary artery.

Ann. Surg. 135:34-38, 1952.

"Never mind, dear, we'll find someone who'll tell you that you have whatever it is you have decided you're sick with."



Polycin combats both gram-positive and gram-negative organisms. Its action over a wide antibacterial spectrum is enhanced by its unique *Fuzene* base.

This original combination of carbowax diesters and petrolatum allows *maximal diffusion* of Polycin's bacitracin and polymyxin content. The antibiotics . . . both notable for a low incidence of sensitization and for demonstrated effectiveness in skin infections . . . are brought into intimate contact with organisms in the lesion.

Polycin is supplied in 15 Gm. tubes. Clinical samples and literature are available on request.

PITMAN-MOORE COMPANY

Division of Allied Laboratories, Inc.

Indianapolis 6, Indiana

*TRADE MARKS

Obocell greatly simplifies the ordeal of a reducing regimen in the management of obesity. The unique **double** action of Obocell (1) suppresses bulk or hollow hunger and (2) curbs the appetite. Obocell also produces a feeling of well-being, thus combating fatigue and irritability commonly encountered when food is restricted. Patients on Obocell eat less, do not violate their diet, lose weight and are satisfied and happy.

A COMBINED HUNGER AND APPETITE DEPRESSANT

Obocell®

Each Obocell tablet contains Dextro-Amphetamine Phosphate, 5 mg.; Methylcellulose, 150 mg.

Dose: Three to six tablets daily, usually given 30 minutes before meals.

Supplied: Bottles of 100, 500, 1000 at prescription pharmacies everywhere.

Professional Literature on Request.

IRWIN, NEISLER & COMPANY • DECATUR, ILLINOIS

Research to Serve Your Practice

Nellie Nifty, R.N.

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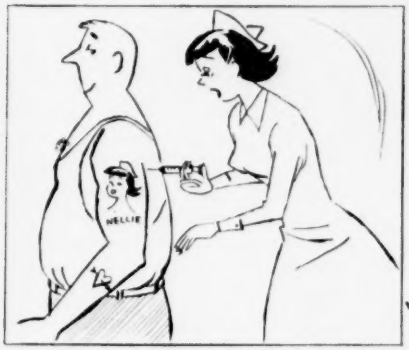


"AND JUST THINK — IF IT WASN'T FOR MY LIVER TROUBLE I MIGHT NEVER HAVE MET YOU."

"GESUNDHEIT!"

"I DON'T MIND AS LONG AS IT ISN'T A BEDPAN."

"THIS ISN'T THE KIND OF NURSES' AID WE NEED!"

"AS SOON AS I LEARNED MY FRIEND WAS SICK I RUSHED OUT AND BOUGHT THESE FLOWERS FOR YOU."

American physicians forge new links in the chain of international understanding with peoples of three continents.

Apostles of American Medicine

ELIZABETH SCHOPPE*

FOR seven years more than 130 doctors, from Seattle to Syracuse, have shared the best in American medical knowledge with the people of thirteen countries.

In 1945, Dr. Maurice B. Visscher, head of the department of physiology at the University of Minnesota and a member of the Board of Directors of the Unitarian Service Committee, returning from six months with the USC Nutrition Mission in Italy, stressed the plight of Europe's medical profession. Isolated from the cultural and scientific advancement of the Western world during the Nazi blackout, professors and students were depressed, disheartened, and in some instances ready to quit.

DOZENS RESPOND TO CALL

The USC placed before the American medical profession the dire need for up-to-date medical information in Europe. Two months of hard work—teaching and clinical. Not much sleep. Sparse food. No remuneration. Only traveling expenses paid.

Dozens of medical authorities responded. And 14 doctors, headed by Harvard cardiologist Paul D. White, left for Czechoslovakia in 1946. In less than two months they traveled 2,375 miles, delivered 226 lectures, made 159 ward rounds, performed 28 operations, and held 93 conferences. For their contribution, the Czech government bestowed on each member of the mission the Order of the White Lion, highest honor given to civilians.

To their efforts the late Laurence A. Steinhardt, U.S. ambassador to Czechoslovakia at the time of the mission, paid tribute: "Nothing the American government or the American people have done to help the Czechs and the Slovaks has been so much appreciated as the work of the Unitarian Service Committee's medical mission. . . . It has left an everlasting mark that the Czechs and Slovaks will always remember."

With the Czech mission's return to the United States, the idea snowballed. In all, the USC has organized seventeen medical and two dental missions.

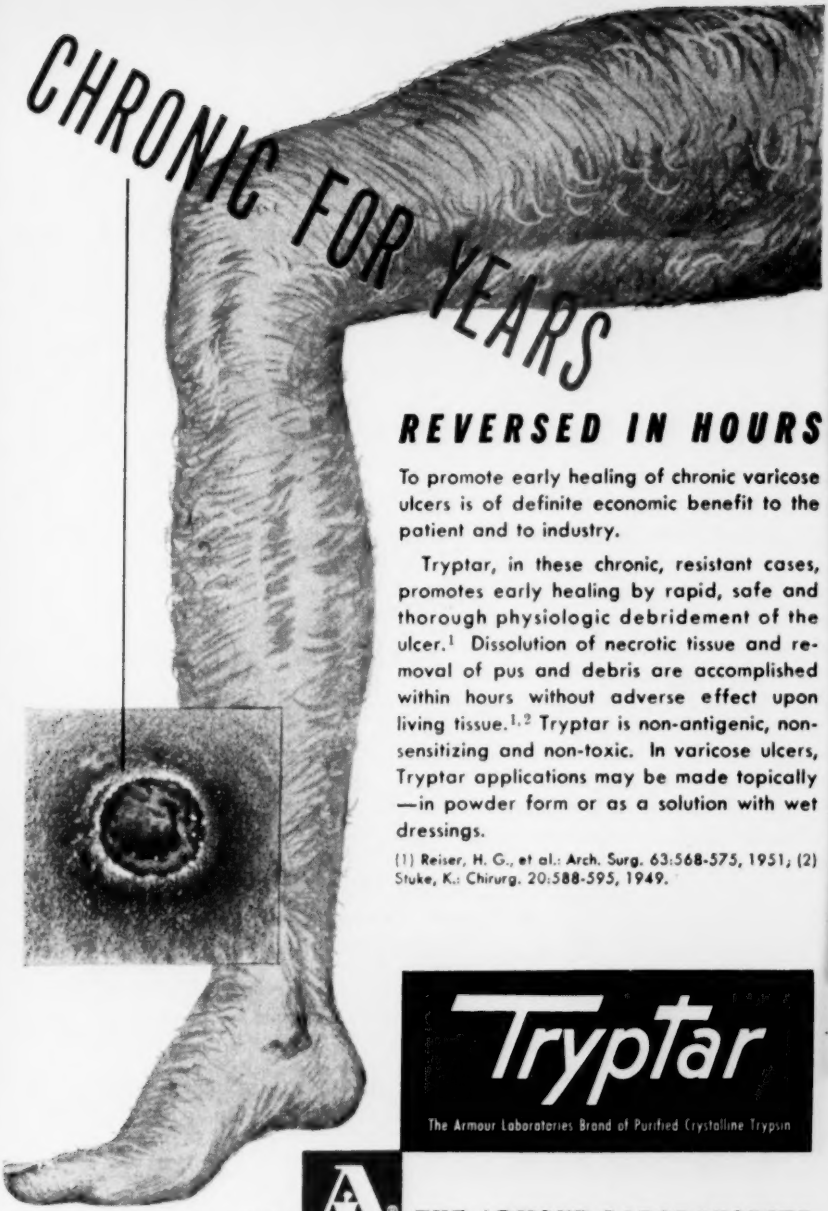
MANY MORE ADDED

In addition to White, the names of Naffziger of California, Brunschwig of Cornell, Aub of Harvard, and Rovenstine of N.Y.U. are among many on the roster. Added to these are the names of Evang of Norway, Theorell of Sweden, Price Thomas of London, and Mooser of Switzerland.

Besides Czechoslovakia, the missions have visited Italy, Germany,

(Continued on page 162)

* Unitarian Service Committee, Inc., Boston.



REVERSED IN HOURS

To promote early healing of chronic varicose ulcers is of definite economic benefit to the patient and to industry.

Tryptar, in these chronic, resistant cases, promotes early healing by rapid, safe and thorough physiologic debridement of the ulcer.[1] Dissolution of necrotic tissue and removal of pus and debris are accomplished within hours without adverse effect upon living tissue.[1,2] Tryptar is non-antigenic, non-sensitizing and non-toxic. In varicose ulcers, Tryptar applications may be made topically —in powder form or as a solution with wet dressings.

(1) Reiser, H. G., et al.: Arch. Surg. 63:568-575, 1951; (2) Stuke, K.: Chirurg. 20:588-595, 1949.

Tryptar

The Armour Laboratories Brand of Purified Crystalline Trypsin

world-wide dependability

THE ARMOUR LABORATORIES

CHICAGO 11, ILLINOIS

PHYSIOLOGIC THERAPEUTICS THROUGH BIORESEARCH

An EFFECTIVE ANTIHISTAMINE

—permits an unusual degree of "on-the-job" alertness

Drowsiness is *not* an inescapable side effect of antihistaminic therapy. "Daytime alertness" under Neohetramine administration was totally unimpaired in 97.8% of 500 patients in controlled studies.[1,3,4]

As reported by investigators —

"Side reactions obtained from Neohetramine are definitely lower" than those observed from the use of most other drugs.[2]

"Only a small percentage had drowsiness"...as compared with the effects of most other drugs.[1]

"Side effects were rare ..."[3]

Neohetramine "was found particularly useful in patients unable to tolerate other antihistaminic drugs."[4]

References: 1. Criep, L. H. & Aaron, T. H.: J. Allergy 19:215, 1948. 2. Criep, L. H. & Aaron, T. H.: J. Pediat. 34:414, 1949. 3. Friedlaender, S. & Friedlaender, A. S.: J. Lab. & Clin. Med. 33:865, 1948. 4. Schwartz, E.: Ann. Allergy 7:770, 1949. 5. Waldbott, G. L. & Borden, R.: Ann. Allergy 6:305, 1948.

against SEASONAL HAY FEVER

In a series of clinical studies, involving 282 cases of seasonal hay fever, Neohetramine relieved symptoms in a high percentage of cases.[1,2,3,4]

Many investigators[1,2,3,4,5] have commented on the extent to which the "therapeutic results obtained from the use of Neohetramine compare favorably with the results obtained from other antihistaminic agents",[2] in hay fever and other allergic manifestations.

Indeed, in a comparative study by Schwartz with five other widely used antihistamines, on a total of 832 cases, the antihistaminic effectiveness of Neohetramine was shown to be comparable to the average of the other products tested.[4]

NEPERA CHEMICAL CO., INC., YONKERS 2, N.Y.
Pharmaceutical Manufacturers

Neohetramine®

—for Antihistaminic Effectiveness
plus "Daytime Alertness"

NEOHETRAMINE hydrochloride—Brand of Thonzylamine Hydrochloride [N,N-dimethyl-N'-p-methoxybenzyl-N'-(2-pyrimidyl)-ethylenediamine monohydrochloride]. *Tablets*—25, 50, and 100 mg. in bottles of 100 and 1000. *Syrup*—6.25 mg. per cc. in bottles of 1 pint. *Cream* 2%—in water-miscible base in collapsible tubes of 1 oz.

Japan, Greece, Poland, Finland, the Philippines, Austria, South America, and the 3-year-old State of Israel, the last enterprise a joint undertaking with World Health Organization.

Participants in these projects represent forty American universities and ten nonteaching institutions including Rockefeller Foundation, Rockefeller Institute for Medical Research, the Fels Research Institute, and the American Pharmaceutical Association. More than ten foreign universities have been represented. Some of the missions have been in cooperation with UNRRA, WHO, the International Refugee Organization, the Department of State, and the Department of the Army and with the U. S. Office of the High Commissioner for Germany.

The USC is a nonsectarian, voluntary agency whose purpose is to serve those in need, regardless of race, color, or creed. Its personnel, chosen for professional qualifications and special aptitudes for particular countries, includes Protestants, Roman Catholics, and Jews.

CLOSELY KNIT TEAMS

The missions vary in composition and size. The host countries say what specialties they need. These are considered as far as possible. The size of a mission varies from 7 to 15 professional members plus an administrative staff.

Each mission is organized into closely knit teams whose activities are formal lectures, discussion groups, ward rounds, practical clinical demonstrations, round tables, and informal shop talk.

On the professional level, the close integration of preclinical and clinical sciences and the teamwork among various clinical specialties have been an inspiring revelation to members of the medical profession in foreign countries where rigid departmentalism prevails.

Likewise, clinical demonstrations of certain types of surgery, anesthesiology, and pre- and postoperative care have prepared the way for further progress.

For example, Dr. Howard C. Naffziger, professor of neurologic surgery at the University of California Medical School in San Francisco, chairman of the joint USC-WHO mission to the Philippines, performed a brain operation unknown in that country. Dr. George H. Humphreys II, professor of surgery at Columbia University College of Physicians and Surgeons, did the first pneumonectomy in Colombia.

BY-PRODUCT FRIENDSHIP

Several thousand dollars worth of modern American medical books and equipment are taken with each mission and left at the medical centers. In at least one instance, the books have been the nucleus of a new library to replace one destroyed by the war.

International friendship, which at first was a by-product, now is a major objective of the missions.

Dr. Maury Massler, professor and head of the division of graduate pedodontics at the University of Illinois College of Dentistry, who participated in the Italian Nutrition Mission and this summer went to Germany as a member of the USC dental team, believes the missions serve an-

IN weight reduction

Biphetacel

"A combination of monobasic amphetamine phosphate containing a ratio of 1:3 of levo to dextro amphetamine (as found in Biphetacel), is more effective in curbing appetite and causing weight loss than the same amount of amphetamine contained in the racemic form where the ratio is 1:1 l/d. There is a relative freedom from side reactions in the patients with the 1:3 l/d combination . . . "*

Biphetacel, because of its unusual anorexic activity and relative freedom from side reactions due to the 1:3 ratio of l/d forms of amphetamine phosphate monobasic, gives maximum suppression in curbing of appetite in both vagotonic or "sluggish" and sympathicotonic or "high strung" patients, stops hunger pains, and helps to prevent constipation which frequently follows restricted caloric intake.

Each Biphetacel tablet contains the preferred 1:3 l/d ratio as provided by Racemic Amphetamine Phosphate Monobasic 5 mg. and Dextro Amphetamine Phosphate Monobasic 5 mg.; Metropine® (methyl atropine nitrate, Strasenburgh) 1 mg., Sodium Carboxymethylcellulose 200 mg.

Dosage: 1 tablet ½ hour before meals, three times daily, for the vagotonic type. Increase this dose, if necessary, to achieve the desired clinical result. ½ tablet ½ hour before meals, three times daily, for one week for the sympathicotonic type. If no signs of intolerance develop, increase this to 1 tablet. Supplied in bottles of 100 and 1000 scored tablets.

Literature and supply for initiating treatment available on request.

***Freed, S. C. and Mizel, M.—in press**

Effectively Achieves

4 MAJOR OBJECTIVES...

1. **CURBS APPETITE**
2. **PREVENTS CONSTIPATION**
3. **DECREASES GASTRIC MOTILITY**
4. **PROLONGS EMPTYING TIME OF STOMACH**

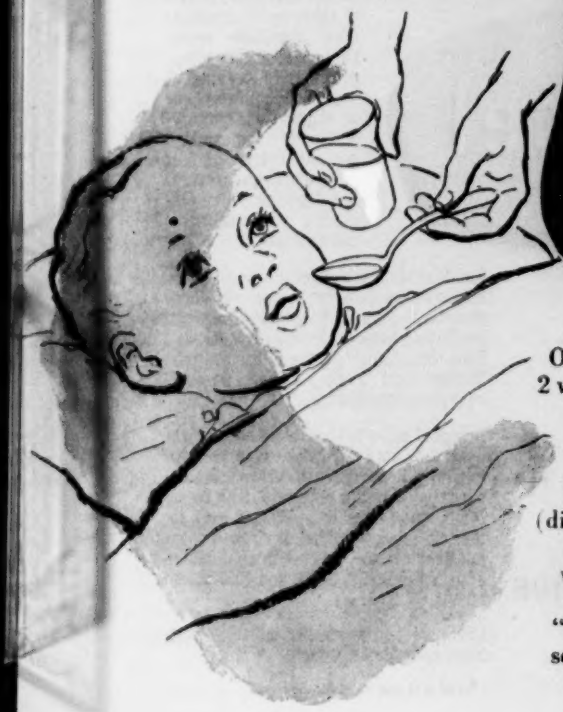
Strasenburgh

R. J. STRASENBURGH CO.
Rochester, N. Y., U. S. A.

citrus is virtually

NON-ALLERGENIC

TYPICAL PATCH TEST



Over 400 infants and children from 2 weeks to 6 years of age acted as test subjects to check the incidence of sensitivity to orange juice. After 2 to 12 months' observation,* "no disturbance of bowel function (diarrhea or constipation) that could be attributed to the orange juice" was found. Also, the occurrence of regurgitation and rashes was "minimal". In the rare instances of sensitivity, care exercised by gentle reaming of juice (or the use of frozen concentrate) to avoid contamination with peel oil usually obviates the difficulty.

**J. Pediat. 39:325, 1951*

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other function, too. The average European thinks of the American as a young, rambunctious, thoughtless, and overly wealthy person. Since the medical missions consist of mature and psychologically oriented personalities, they give the people of Europe a more correct picture of the American.

RICH EXPERIENCE

It is significant that one of the first educational projects which the World Health Organization of United Nations undertook was the sponsorship of an international medical mission.

This mission went to Austria in 1947 and was operated by the USC. Dr. Visscher was chairman. To the Americans participating, the mission was a rich experience.

At the reception which the Medical Faculty of Vienna gave to the visiting doctors, Prof. Wolfgang Denk, Austria's leading thoracic surgeon, humbly acknowledged that the medical glory that was Vienna's for two centuries had been transferred to America.

In 1948, the USC, in cooperation with the International Refugee Organization and the American Jewish Distribution Committee, organized a new project. It was a refresher course for DP physicians in camps in Germany awaiting resettlement in the United States and other countries. A similar undertaking in cooperation with IRO was conducted in Germany the following year, when the USC sent a team of physicians, pharmacists, and dentists to give refresher courses to displaced persons in those fields.

Although the Americans were not responsible for technical training of displaced persons for jobs in this country, many of them on their return helped to resettle the DP's in the United States.

VENTURE IN ASIA

The refresher courses were a lifesaver to homeless men and women, cut off from the world for two, three, and four years in concentration camps, followed by more years as displaced persons.

The initial venture of the USC in Asia was a joint medical mission with WHO to the Philippines in 1948. While important exchange of information took place in the fields of neurosurgery, internal medicine, and venereal disease, the most spectacular immediate result was the authorization by the Philippine government of $100,000 to establish a laboratory for the production of BCG vaccine for a tuberculosis control campaign.

The success of the medical missions, no doubt, is primarily due to the mission members—men of unquestionable eminence in their respective fields, who are motivated by a sincere desire to create good will.

In the fateful year of 1950, the USC was invited to send missions to two occupied countries: Japan and Germany.

General Headquarters, Supreme Commander for the Allied Powers requested the USC to organize a team of doctors to conduct institutes on medical education in Japan.

The purpose was to demonstrate some tangible form of American good will to the Japanese and to assist in the reorganization of Japanese

medical training begun by SCAP after the war.

A 12-man team was recruited with Dr. C. N. Hugh Long, dean of the School of Medicine and professor of physiologic chemistry at Yale, as chairman. Dr. R. Keith Cannan, professor of chemistry at New York University College of Medicine, was co-chairman.

TWO-WAY PROPOSITION

The Japanese project was an innovation: Its pattern was that of an institute, and it marked the first time that a voluntary agency was invited to send medical personnel to Japan.

Many Japanese approached the first session with misgivings. But after the first week, when they realized that the institute had no purpose other than the exchange of information and the sharing of knowledge, learning became a two-way proposition.

The USC institutes covered a period of two months. The first month an institute was conducted at the universities of Tokyo, Keio, and Jikekai in Tokyo. Some 220 professors from twenty-two medical schools in eastern Japan attended. The second institute was held at the universities of Kyoto and Osaka, where twenty-four medical schools were represented by 240 doctors.

FIRST CPC IN JAPAN

SCAP requested less than 250 doctors to attend each institute. Indicative of their enthusiasm, however, were the occasions when 600 or more thronged the conferences.

Among the innovations which the Americans introduced were the first clinical pathologic conferences ever held in Japan. Before the institute left for home, three universities had made plans for CPC's to be held in the future.

The institute also enabled Japanese scientists to meet one another for the first time and share their knowledge.

From the time of its founding, the Unitarian Service Committee had felt deeply the need to cooperate with those elements in Germany opposed to a totalitarian philosophy of life and actively working toward democracy.

GERMANS GRATEFUL

In 1948 a grant from the Oberländer Trust and cooperation from the Department of the Army made it possible to send a team of American medical professors to Germany. Dr. Otto Krayer, German-born associate professor of pharmacology at Harvard Medical School, who went to Czechoslovakia in 1946, headed the group. They visited medical schools in Frankfurt, Berlin, Göttingen, Munich, Tübingen, and Freiburg.

This effort marked the first time in many years that a group of American university faculty members, not connected with government and without political motives, met with their German counterparts on a basis of equality in the scientific field. The mission was eminently successful. As in the case of the medical institute in Japan, initial hesitation and reserve on the part of the Germans gave way to a feeling of gratitude and friendship as the spirit and intent of the Americans became clear.

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At the conclusion of two months in Germany, the mission made specific recommendations both to the USC and the Department of the Army for a follow-up program. These resulted in bringing to the United States a group of German professors to study at firsthand the work going on in American medical teaching centers.

Funds were obtained to assist an outstanding German scientist in the reequipment of his research laboratory for muscle proteins at Tübingen. The Germans themselves made arrangements for translation into German and publication of lectures given by the mission.

RENAISSANCE IN THE REICH

Last summer another group of American doctors went to Germany. This mission was in cooperation with the Department of State.

They found Germans doing excellent clinical work and highly significant research, despite inadequate equipment and materials; many schools were admirably equipped, and some individual institutes and clinics had facilities that equalled or surpassed their American counterparts.

They heard repeatedly from their colleagues that the USC medical mission of 1948 marked the renaissance of German medicine.

One of the few glaring weaknesses in medicine in many universities in Germany, as in other countries, is in the field of anesthesia.

At the University of Marburg there is no department, no professor in that branch of medicine. Until the mission's visit last year, there was relatively little known of the importance of professional anesthesiology or appreciation of the value of blood transfusions and similar supportive therapy to surgery. Marburg, however, does have a small blood bank; for want of proper receptacles, the technicians use Coca-Cola bottles.

The German professors listened to what the Americans had to say on modern technics of anesthesia but were not particularly impressed.

CONVINCING DEMONSTRATION

Then, Dr. William P. Longmire, Jr., chairman of the department of surgery at the University of California in Los Angeles, assisted by Dr. John B. Dillon, associate clinical professor of surgery (anesthesia) at the University of Southern California, performed a resection for a coarctation of the aorta. Usual German practice is to anesthetize the patient deeply with ether; this may render him unconscious for several hours after the operation and is sometimes accompanied by shock from insufficient application of supportive therapy during the procedure. In this case, however, thanks to the transfusion of 8 pt. of blood during the five hours of surgery, and the administration of a combination of anesthetic

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[1] Schoenheimer, R., Ratner, S., and Rittenberg, D., J. Biol. Chem., 127:333, 1939 and 130:703, 1939.

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agents by a method designed particularly for this type of operation, the patient awoke soon after its conclusion. This demonstration, according to the Americans, made more impression than hours of talk.

It made an impression, not only upon the students, but upon the veteran surgeons who witnessed it. "On a follow-up visit to Marburg," Dr. Dillon reported, "the surgeon made a particular point of telling me he used 1,200 cc. of blood for an operation and was using endotracheal anesthesia for large abdominal surgery—the case in point being a total gastrectomy. I believe this is progress. [Administration of] anesthesia . . . is now followed by blood pressure, pulse records, and so forth, and by complete anesthetic records—also progress."

In general, however, the Germans listened carefully but kept their own counsel. The mission members were not surprised. No doctor, trained all his life one way, will abandon the old methods after a month's demonstrations and lectures, however persuasive. As time passes, and published reports add further validation, the new way may perhaps seem more attractive to some of them, the old one worth changing. The students and interns so ready with questions may change sooner.

BAFFLED BY GENEROSITY

The Marburg month provided also a great opportunity for virtually all

the German students and instructors. They devoured copies of lectures by the American doctors. They were puzzled that these and other materials were theirs for the asking.

"Why do you give us these books?" one student asked. "Why do you give these lectures, show these films? Surely these things cost money. We find it hard to believe that people can be so, so generous."

From Marburg, the mission flew to Berlin. If the Americans had been welcomed by Marburg, they were overwhelmed by the students of Western-held Berlin, where they spent most of their time with the medical faculty of the Free University, newest of German educational institutions.

Of the 5,200 students at the Free University, 60 to 70% come from the Eastern zone of Germany, including the Russian-occupied sector of Berlin, the remainder from the Western sectors of the city. Each year, nearly 2,000 young men and women apply for admission to the medical school, which has 950 students and now admits 50 newcomers each semester.

BLUE BABY OPERATION

Even with hardship and scarcity of books, good work is being done at the Free University, notably in anatomy, physiology, biochemistry, and pharmacology, some of it by men who have resisted great inducement to transfer their activities to the

Eastern Zone. Research is going forward, in some cases with adequate equipment, in others with carpenter-made equipment.

Highlight of the 1950 mission's visit in Berlin was the performance of the Blalock-Taussig procedure, the first "blue baby" operation seen in the city. Reported extensively in the Berlin press, it excited wide comment throughout the Free University. The director of the surgical clinic announced that, in the future, efforts would be made to perform this operation for all Berlin children who might require it.

HORIZONS LIFTED

The 1951 USC medical program included, in addition to the USC-WHO mission to Israel and the dental team to Germany, a mission to Japan, headed by Dr. Paul Beeson, professor of medicine at Emory University, Atlanta.

Dr. Haven Emerson, professor emeritus of public health practice at the College of Physicians and Surgeons at Columbia University and former health commissioner of the City of New York, was chairman of a public health planning team which the USC sent to Germany last summer.

How many persons have benefited or how their futures will be affected by these international projects cannot be determined. Time, the ultimate judge of methods and men, will give the long-range answers.

These are the achievements now: Contact is made between minds. Horizons are lifted. New links are forged in the chain of understanding that some day will unite all men in human brotherhood.

Doctor to Doctor

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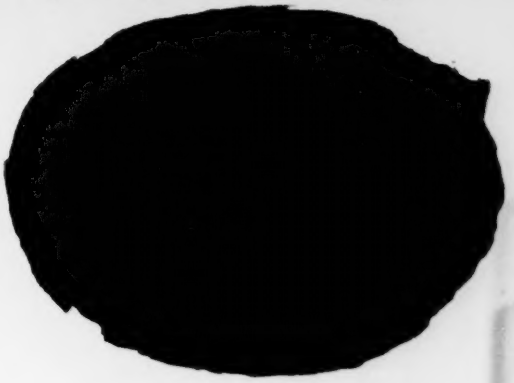

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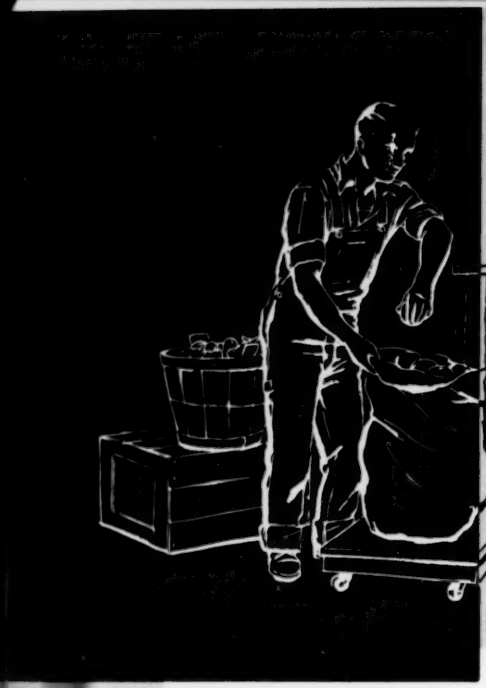

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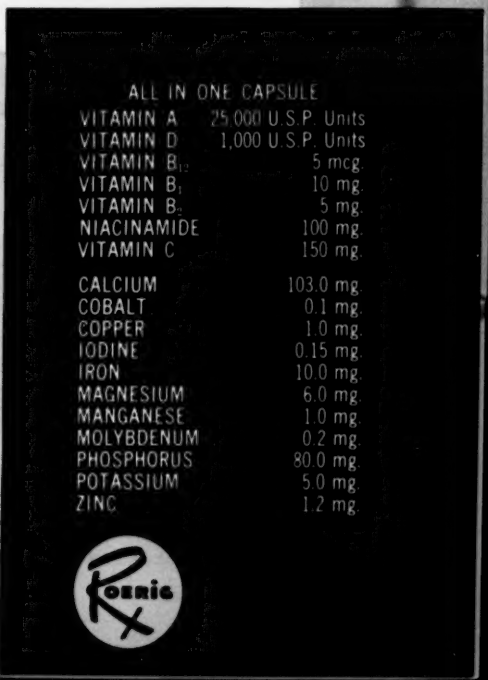

1. Spies, T. D.: Section on Metabolism and Nutrition 1948 Year Book of Endocrinology, Metabolism and Nutrition (Year Book Publishers, Inc., Chicago) p. 265.
2. Mann, G. V., and Stare, F. J.: Nutritional Needs in Illness and Disease, J.A.M.A. *142*:409 (Feb. 11) 1950, p. 412.

536 Lake Shore Dr., Chicago 11, Illinois

Washington Letter

Rehabilitation of Handicapped Presents Challenge to Society

How to improve the lot of the handicapped, physically and economically, is one of the unsolved problems of industrial society.

Rapid industrialization, it is recognized, is building up the total of handicapped out of all proportion to the increasing population. Just as important factors are crowded, unhealthy urban living conditions and the emotional strains of complicated and high-speed modern life.

Even those who choose to stay on the farms aren't escaping entirely; a phenomenally high degree of mechanization has come to the farms themselves. Farming now ranks as one of the more hazardous occupations.

In the federal government, a great deal of the work for the physically handicapped is entrusted to the Office of Vocational Rehabilitation in Federal Security Agency. Although finances have critically restricted its actual operations, the Office has had some success in getting over to the public this startling but easy-to-understand message: Rehabilitation pays for itself not only in human values but in cold cash; on the average, federal income taxes paid by rehabilitated handicapped persons more than make up for the money spent in their behalf.

Also to be considered are the earnings of rehabilitated persons and the millions of dollars saved when they are able to leave public relief rolls.

Wide-open opportunities in the field of rehabilitation are clearly outlined in the report of the Task Force on the Handicapped, which studied the problem for eight months at the request of the Office of Defense Mobilization.

The 11-man Task Force, which had 4 physicians among its members, was instructed to [a] learn the essential facts about the handicapped, [b] learn whether available rehabilitation facilities were being used, and [c] make recommendations.

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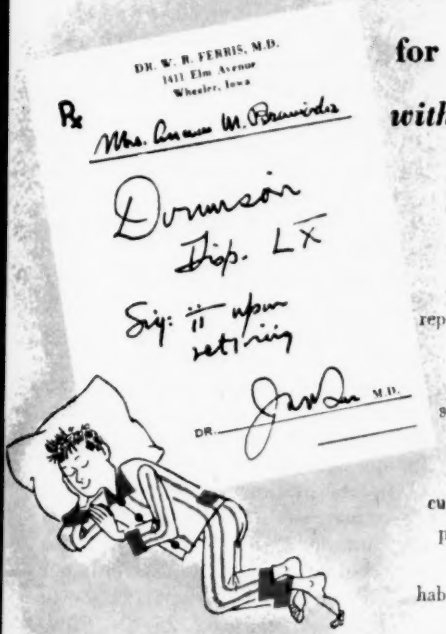

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On the first point, the exhaustive report found that:

Each year 250,000 persons become crippled or otherwise handicapped, and the nation struggles under a backlog of 2,000,000 persons who could be rehabilitated.

Because the situation is not corrected, the victims and the nation suffer annual wage losses of several billion dollars.

There are shortages among almost all the professional personnel needed for rehabilitation—specially trained physicians, physical therapists, psychologists, specialists in vocational rehabilitation, and specialists in job placement.

Facilities are usually inadequate and often nonexistent.

The fact that "rehabilitation pays for itself" is not challenged, but still money is not voted in sufficient amounts to carry on local, state, and national programs.

"He's wonderful, Marge. It's all I can do to keep from running out of symptoms."

On the second point, the Task Force came to the conclusion that lack of interest, or lack of direction, was preventing adequate use of potential services, particularly on the state and local level. The report is particularly critical of what is not happening on the local level: "A majority of our cities, towns and villages—and through them our nation—are not making the most of the resources they already have. It is here, in the individual community, that the greatest opportunity exists to muster the full force of local talent and energy to meet the needs of the disabled and to bring them into the local labor force."

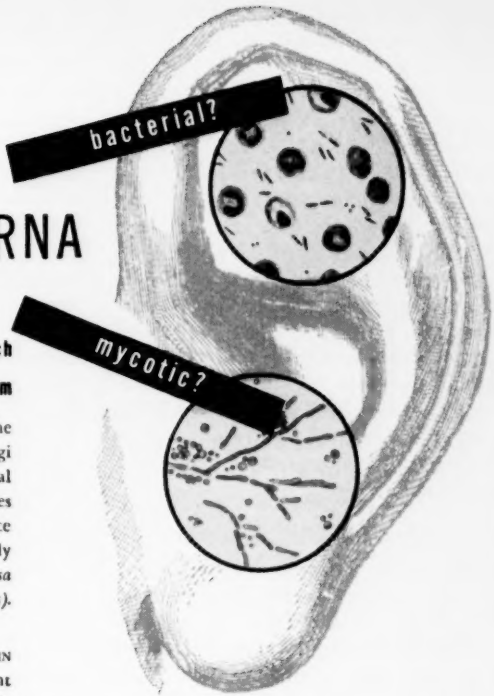
However, even if communities meet their responsibilities, more money will have to be spent for facilities, because "existing facilities are, for the most part, being used at maximum capacity, with most rehabilitation centers having long waiting lists for new admissions."

On the national level, the Task Force proposes that the United States step up every phase of its program for rehabilitation, particularly that it require government departments to cooperate in the work of the President's Committee on Employ the Physically Handicapped Week.

In addition, the report recommends that the federal government intervene in two directions to insure more personnel trained in rehabilitation:

1] A national campaign is proposed to recruit more students for careers in rehabilitation. Professional associations would be invited to co-

OTITIS EXTERNA



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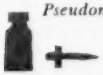

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SAMPLES AND LITERATURE ON REQUEST

operate with private and governmental agencies to insure an adequate flow of students into these professions.

2] A program of graduate student grants would be set up and administered by U.S. Public Health Service to train physicians and others needed for rehabilitation.

The report is impressive and persuasive. How effective it will be is another question. If he thinks the situation critical enough, Mobilization Director Charles E. Wilson should be able to get action somewhere along the line. But probably not from Congress, to whom rehabilitation is an old problem but elections always new.

Federal Health Activities

Whatever happens, this much is certain: it will not be a lush year for federal health activities.

President Truman's proposals for the fiscal 1953 budget, starting next July, now are in the hands of congressional committees. In no instances are the funds lavish, and in many Mr. Truman and his Budget Bureau have cut requests down to totals which will require sharp cutbacks in operations.

The Hill-Burton hospital construction program, for example, was allocated only $75 million in new funds for the year. This compares with $82.5 million allotted for the current year—and the lower figure was set in spite of mounting construction costs.

The National Cancer Institute, which uses some funds for its own research and distributes others as research and control grants, fared even worse than the Hill-Burton organization. Currently it is spending about $20 million; next fiscal year it is expected to get along on a little over $15 million.

Heart Institute is expected to cut its current $13 million program down to a little under $10 million. Mental Health Institute comes off fairly well; it will be expected to execute only a relatively small cut, from $11 million to $10.8 million.

Two programs were allocated large increases—but because of national defense needs, not medical. National Science Foundation, which is gradually taking over the job of correlating all research, would be authorized $15 million for next year, in contrast with the $3.5 million it is spending this year to start its program.

Federal Civil Defense Administration would get $2.6 million in place of the current $1.6 million for its medical program, exclusive of medical supply purchases. Budget Bureau decided CDA could have up to $193 million for purchase of regional medical stockpiles to be rushed to attack areas. Currently, CDA has $50 million for this purpose.

Biology and medicine activities of Atomic Energy Commission are allocated about $1 million more than this year, when they had $23.2 million.

The requests, of course, are only the amounts the Budget Bureau thinks will be adequate. Congress has the right, if it so chooses, to set the figures at any amount. But there is not much chance of important increases; the Budget Bureau has given Congress the only excuse it needs to hold down on spending.

Washington Notes

Red Cross and cooperating blood banks, the collecting agency in the newly organized National Blood Program, are coming close to their goal of 425,000 pt. per month.

Sen. Lodge (R., Mass.), introducing a bill to bring lawyers under social security on a voluntary basis, used a number of arguments that would apply also to physicians. So far American Medical Association has opposed the idea, but American Dental Association's position is not too definite.

Special forms for reporting health and welfare plans in union contracts are available at field offices of Wage Stabilization Board and Labor Department's Wage-Hour Division. Reports must be sent to WSB in Washington. Plans may be put into effect in sixty days if there's no objection from WSB.

Barring a late shift in sentiment, the House Armed Services Committee will recommend deferment of medical, but not premedical, students from reserve service. However, all will have to take six months of basic training. Medical students would start seven and one-half years of reserve service on completion of internships.

Testifying on pay increase bill, Assistant Defense Secretary Anna Rosenberg said the military services were able to give medical care to fewer and fewer dependents and planned to take almost no hospital cases.

Oscar Ewing, Federal Security Agency, is renewing his arguments for national compulsory health insurance, although Mr. Truman is easing off the issue.

Our Office Nurse

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DE LA MÉTHODE EN MÉDECINE *by* René Cruchet. 2d ed. 248 pp. Presses Universitaires, Paris. 560 fr.

STUDIES IN MEDICINE: A VOLUME OF PAPERS IN HONOR OF ROBERT WOOD KEETON. 422 pp., ill. Charles C Thomas, Springfield, Ill. $8.50

THE MEDICAL ANNUAL, 1951: A YEAR BOOK OF TREATMENT AND PRACTITIONERS' INDEX *edited by* Sir Henry Tidy *and* A. Rendle Short. 420 pp., ill. John Wright & Sons, Bristol, England. 27*s.* 6*d.*

ESSENTIALS OF VIRUS DISEASES *by* Patrick N. Meenan. 260 pp., ill. J. & A. Churchill, London. 20*s.*

HEADACHE *by* Louis G. Moench. 2d ed. 217 pp., ill. Year Book Publishers, Chicago. $4.50

INTERNAL MEDICINE, ITS THEORY AND PRACTICE *by* John H. Musser; *edited by* Michael G. Wohl. 5th ed. 1,563 pp., ill. Lea & Febiger, Philadelphia. $15

Urology

ATLAS OF GENITO-URINARY SURGERY *by* Philip R. Roen. 336 pp., plates. Appleton-Century-Crofts, New York City. $8

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PRAKTISCHER LEITFADEN DER BERUFLICHEN HAUTKRANKHEITEN *by* C. Carrié. 186 pp., ill. George Thieme, Stuttgart. 22 DM.

LEHRBUCH DER HAUT- UND GESCHLECHTSKRANKHEITEN *by* W. Lutz. 658 pp., ill. S. Karger, Basel. 64 Sw. fr.

Surgery

CHIRURGIE DU COEUR *by* F. D'Allaines *et al.* 346 pp., ill. L'Expansion Scientifique Française, Paris. 1,200 fr.

LEHRBUCH DER CHIRURGIE *edited by* E. Gohrbandt *et al.* 10th ed. 2 vols., 1,600 pp., ill. Gustav Fischer, Jena. 98 M.

MEISTER DER CHIRURGIE UND DIE CHIRURGENSCHULEN IM DEUTSCHEN RAUM: DEUTSCHLAND, ÖSTERREICH, DEUTSCHE SCHWEIZ *by* H. Killian *and* G. Krämer. 232 pp., ill. Georg Thieme, Stuttgart. 24.80 DM.

MAMMAPLASTIK *by* Fritz Schörcher. 78 pp., ill. Riegersche Verlagsbuchhandlung, Munich. 18 DM.

THE 1951 YEAR BOOK OF GENERAL SURGERY *edited by* Evarts A. Graham. 621 pp., ill. Year Book Publishers, Chicago. $5

Obstetrics & Gynecology

EXERCISES AFTER CHILDBIRTH *by* Gertrude Behn. 32 pp., ill. E. & S. Livingstone, Edinburgh. 3*s.*; Williams & Wilkins Co., Baltimore. 50¢

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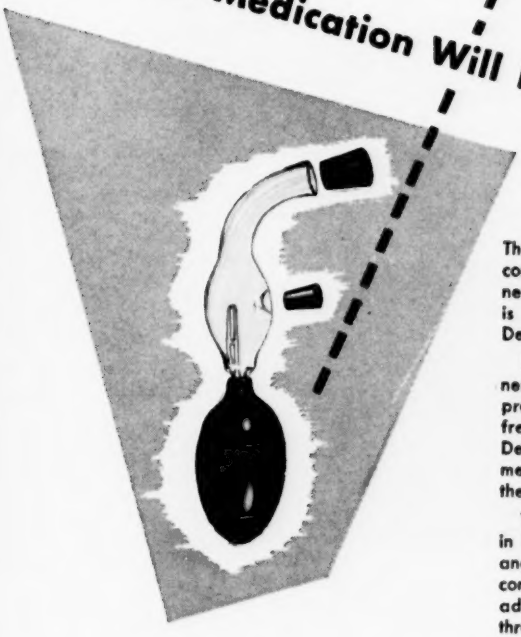

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The editors will pay $1 for each story published. No contributions will be returned. Send your experiences to the Patients I Have Met Editor, MODERN MEDICINE, 84 South Tenth St., Minneapolis 3, Minn.

Concealed Weapon

I called at the house in answer to a summons to see a 4-year-old to whom I had given penicillin some months before. As I was ushered into the sickroom, the young patient warily watched my every movement. When I opened up my bag, she anxiously asked, "Did you bring your 'shooter' with you again?"—A. E. N.

Change in Status

When I completed my internship, I went into the mountain country to pick up some experience. One morning an old mountaineer carried a young fellow into my office and placed him on the examination table.

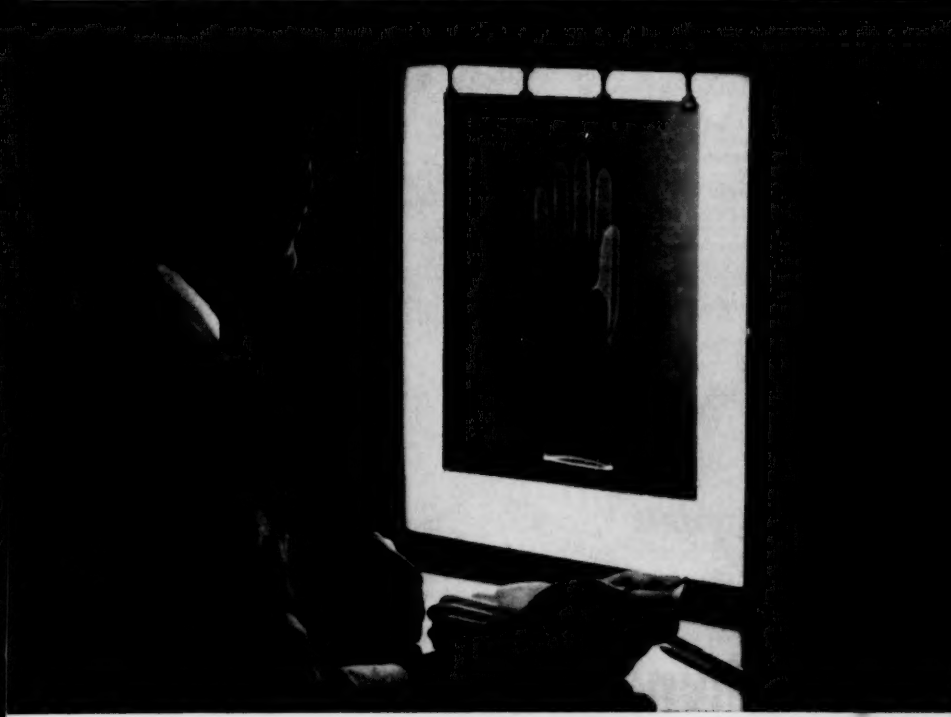
"Doc," the old man drawled, "can yah fix up my son-in-law? I shot him in the leg."

"Yes," I replied, "I think we can take care of him all right. But tell me, why would you want to shoot your kin?"

"Wall, Doc," answered the mountain man, "when ah shot him he warn't no kin."—J. F. T.

"Whadda yah know, twins!"

B.F.Goodrich



X-ray shows uniform strength of B. F. Goodrich glove

THE X-ray above shows why B. F. Goodrich surgeons' gloves are strong —*uniformly* strong. The X-rayed glove was picked at random from regular stock. As you can see, there are no weak spots, no thin or heavy spots.

From wrist to fingertips, B. F. Goodrich surgeons' gloves are *uniform*—uniformly free of defects. It is impossible for foreign particles to get imbedded between layers since these gloves are made of just one single layer of purest latex. These gloves are actually much thinner than the skin they cover—and much stronger, too!

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Surgeons' Gloves

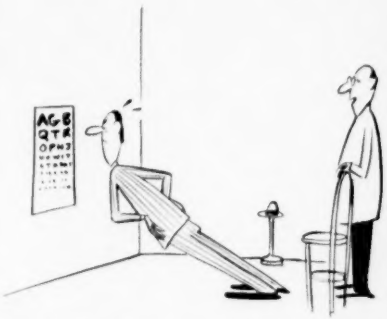
Local Dialect

I was walking down the street with an old friend, when he reached into his pocket and pulled out a bottle of pills.

"Jim," he said, "how do you pronounce the name of this medicine?"

I looked at the label and read, "Tummy Kures."

"That's funny," said my friend. "I heard over the radio last night that all doctors pronounce these pills 'Harmless.'"—J. F.



"Face it, man. You need glasses!"

Not Ruled Out

A young woman came into my office complaining of nausea and abdominal pains.

"Are you married?" I asked.

"Yes," she said, blushing prettily. "Just last month."

"In that case," I said, "we can hardly think in terms of pregnancy, can we?"

"Why not?" came the surprising reply. "I was courting long before that."—J. F.

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HIGHLY EFFECTIVE
IN MANY UPPER RESPIRATORY INFECTIONS

In the local treatment of many upper respiratory infections the combined use of decongestant medication and bacitracin has proved of therapeutic as well as symptomatic efficacy.[1,2] Nasal ventilation is promptly improved, and—as many pathogens present in the nasal passages and sinuses are bacitracin-sensitive—the period of infection is reduced.[3]

Since bacitracin is virtually nonallergenic, adverse local reactions need not be feared.

Bacitracin-Nasal-C.S.C., when reconstituted for use, presents 250 units of bacitracin per cc. and 0.25% *dl*-desoxyephedrine hydrochloride in a rose-scented, approximately isotonic aqueous solution. Since it is nonirritant, well tolerated, and pleasantly scented, it is acceptable to children as well as adults. It is indicated in acute and subacute sinusitis and in coryza when sinus involvement develops. Prophylactically, in early coryza it aids in the avoidance of secondary invasion.

Bacitracin-Nasal-C.S.C. is supplied in the dry state in 15 cc. bottles with accompanying dropper, and is to be reconstituted by the pharmacist just before being dispensed.

REFERENCES

1. Prigal, S.J.: Bacteriologic and Epidemiologic Approach to the Treatment of Respiratory Infections with Aerosols of Specific Antibiotics, Bull. N.Y. Acad. Med. *26*:282 (Apr.) 1951.
2. Stovin, J.S.: The Use of Bacitracin in the Treatment of Sinusitis and Related Upper Respiratory Infections, New York Physician *32*:14 (July) 1949.
3. Prigal, S.J., and Furman, N.L.: The Use of Bacitracin, a New Antibiotic in Aerosol Form; Preliminary Observations, Ann. Allergy *7*:662 (Sept.-Oct.) 1949.

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